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Original Correspondence.

THE STEAM COAL QUESTION.—No. II.

Sir,—Although my present letter to you, on the very important subject of the Steam Coal Question, will be brief, I have added a number to the heading; with the intention, by your sanction, of continuing the series as occasion may offer.

Your leading article of last week ought to elicit remarks from whoever may differ with you in your examination of the question. I do not myself entirely concur with it, on the ground that all mention of many well-known kinds of steam fuel is at present omitted by you; whilst it is very likely that, as you proceed their merits will be duly acknowledged and compared.

I am, at this time, chiefly anxious to extend my testimony in support of your primary proposition of the varying proportions of combustible gases to be found in different sorts of coal, and which is as justly applicable to the more general term of *carbonaceous fuel*.

The screw-steamer *Sydney Hall*, Capt. Mitchell, belonging to W. N. De Mattos, Esq., Jeffrey's-square, St. Mary Axe, has just now returned from the Mediterranean, and during her passages, out and home, ample opportunity was given, and availed of, to see how far my "instruments," the patent Regulating Air-Doors with which her boilers are fitted, could be "rightly used, as required." She had previously been, in professional parlance, *short of steam*; but that deficiency my invention has made good by yielding something better than an *increased average pressure* of 3 lbs. throughout the voyage, with several varieties of fuel—Welsh and West Hartley, separately used; these two mixed together; and Warlich's Patent Fuel. Under the direction of her scientific commander, the different descriptions of fuel so used were found to produce very similar, if not precisely equal, results; care having been taken upon each trial to adjust the admission of air "as required" by the peculiar properties of the fuel changed in succession for that which had been previously tried.

In the ensuing number of the *Mining Journal* I dare say I shall be able to publish a copy of the report with which I am promised by the owner of the *Sydney Hall*, a gentleman to whom other steam-ship proprietors are not less indebted, than I am for having my doors tested with such varieties of steam fuel. The facility of using all sorts of coal *beneficially* is of the utmost consequence on long voyages; at the same time that *more steam* is alike important, however short the passages may be.

1, Fish-street Hill, City, May 20. J. LEE STEVENS.

THE STEAM-COAL QUESTION.

Sir,—In your editorial remarks on this subject, last week, you point out that, on comparing the reports of Sir H. De la Beche and Dr. Lyon Playfair with those of the United States Government and others on the same subject, their general truthfulness must be admitted. Certainly there is a great general similarity between the results put forward in both reports, but I believe that on careful examination of the details they will both be found to be incorrect, that they contain internal evidence of the improper character of the means adopted for estimating the relative value of different kinds of coal, and that the individual results of the experimental trials are so discordant as to be unfit for any general conclusion being drawn from them. It is indeed true that in these reports we find all the details of the exact manner and condition under which the experiments were performed; there is the external temperature of the atmosphere; the "dead point observation;" the "much smoke" and considerable quantity of soot in the flues, sometimes indeed "flues choked with soot." And in contrast to this, the report of the Newcastle experiments, conducted by Messrs. Armstrong, Longridge, and Richardson, give us merely the results obtained, with only a very meagre account of the methods adopted, and nothing at all as to the details of the experiments and their results. This is much to be regretted, for several reasons. But in spite of this disadvantage, it is well worthy of notice that the results of the Newcastle experiments relating to bituminous coal, such as that of the Hartley district, have just that relative proportion to the results relating to the anthracite coals of the Welsh coal fields which is indicated by the *theoretical determinations* given in the Admiralty reports. Moreover, while there is this close relative approximation between the actual results obtained by the Newcastle experimenters and the theoretical determinations of the Admiralty reports as regards the different kinds of coal, the absolute magnitude of these two series of results are almost identical. On the contrary, however, the actual results given by the Admiralty reports, and their theoretical determinations, are not either absolutely or even relatively alike; they do not even approximate; they do not differ uniformly; they do not admit of any conclusion being drawn from them, except the very unsatisfactory one that the question of the best coal for marine boilers is not one whit nearer solution, and that it would have been less obscure had these experiments never been made, and their results never published. When we come to examine the conditions under which the experiments were made, the only apparent difference is that in the Newcastle experiments care was taken to prevent the formation of smoke; while in the Admiralty experiments this was not done, and, worse still, the formation of smoke was in varying quantity. In fact, in the former case the coals were completely burnt, in the latter case they were sometimes only partially burnt.

There are probably many who will fail to perceive the propriety of such an investigation as that for determining the best coal for steam navigation being in any case confined to merely scientific results, especially when those results are of the kind not within the Admiralty reports on coal. Nor is it very easy to perceive why such an investigation, extending over some six years, and carried out with all the facilities of Government support, should be limited to the consideration to existing forms of boiler and grate, &c., without any regard to the efficiency and fitness of those arrangements, or any consideration as to the necessity for improvement. If the enquiry were to be thus limited, to what end were such large preparations and repeated grants of money by the Admiralty? A question of such a simple character might be settled without the aid of some dozen chemists.

But I contend that such a limited examination of this important question was by no means contemplated by Mr. Hume, when he suggested that it should be enquired into. The very reasons for which he urged this subject upon the consideration of the Government are sufficient evidence that very much more was intended than the mere consumption of so much coal under a boiler, and the inference of its value from the amount of steam produced, regardless whether the coal was, or was not, properly burnt; whether it was fully rendered available for generating heat, and in producing its full equivalent of steam; or whether one half of the coal was not wasted, going up the chimney as smoke, not only uselessly, but as a source of serious inconveniences.

It is, indeed, singular that the facts pointed out in these Admiralty reports did not suggest to their authors the propriety of some further investigation. Thus, for instance, the coal which they pronounce to be the best as regards heating capability is invariably the worst as regards a very important character for steam coal—its liability to crush into small; while the bituminous coal, like West Hartley, &c., is very much less liable to this, owing to its greater hardness. This fact, together with the close approximation between the heating capabilities of these two kinds of coal, as indicated by calculation, might reasonably have been expected to induce a further examination as to whether the comparatively very low practical value or steam equivalent, indicated by the experiments with the latter kind of coal, was strictly correct, and whether it would not be possible to realise the full heating capability of this coal, which was so far preferable to Welsh coal in the important character of hardness. It has since been found to be very easy to effect this result, and the attempt to do so would have been a far more creditable feature of the Admiralty investigation than the sinistrous speculation by which it is sought to furnish a plausible but specious explanation of the glaring discrepancy between the results of experiment and calculation.

It is to be regretted that the question of steam-coal is beginning to assume a party character, and to be made a bone of contention between the coal owners of different localities. I believe that this course, to the adoption of which the Admiralty reports have undoubtedly given rise, is both objectionable and unnecessary, as well as prejudicial to the true interests of both parties. As was well pointed out by Mr. Lee Stevens, last week, the value of fuel is determined by a number of circumstances, among which the cost arising from carriage is an important one, and, according to circumstances, it will doubtless be found that the coal fields of Wales and of the northern districts are capable of furnishing coal equally well suited for the requirements of steam navigation. The capabilities of the coal from these different localities is, on the average, much the same; the means, however, by which that capability is to be realised differ considerably, and

it comes to be merely a question of cost and convenience which is best to use in particular cases. That being determined, it is, as you justly remark, the work of the mechanical engineer to take the matter in hand, and show us how he can deal with materials the value of which he knows, but which differing in special characters, require an appropriate adaptation of the conditions of use, in order to render each kind fully effective. P.

May 17.

TRURO MINING SCHOOL.

Sir,—The unhappy fate of this institution was predicted by me more than twelve months ago, simply from the published curriculum and the apparent inexperience of the council whose high privilege it was to direct and control the teachers and students. I can well remember that some of the readers of this Journal approved of my remarks on the subjects taught and objects aimed at in the Truro Mining School, while others, again, disagreed with them, and almost ridiculed the idea of such an establishment falling in its praiseworthy attempt to disseminate scholastic learning amongst the untutored Cornish miners. It was hardly, then, to be expected that I could read the Cornwall correspondence of last week's Journal without considerable interest, and without reviewing again my published opinions respecting the elements which I deemed necessary to the success of such an institution.

It now appears that this renovator of the rusty miner is on its last legs, and struggling for its existence. It has quickly risen, culminated, and is now dimly shining in the distant horizon, from which a few more lingering steps will plunge it into impenetrable darkness. I cannot, however, join your respected Cornwall correspondent in his regret at the downfall of this mining school, because I sincerely believe that it lacks an element which is essential to success. What reply could be given to such questions as the following—Is it not the avowed purpose of this school to educate the select few, who can well afford to pay a costly fee? Can the Cornish workmen's sons accomplish this, unaided by deeds of costly and heartless charity? Will the honest workmen of Cornwall rejoice at the prospect of intellectual pauperism? Is it good policy, or consistent with the precepts of religion, to develop and encourage in the minds of workmen a spirit of dependence, or rather servitude? Such important enquiries as these, I regret to state, have not received sufficient attention from our often-misguided but still well-meaning statesmen; and no public institution which cannot render an intelligent account of them can expect the warm sympathy and support of the Cornish miner. The Royal Institution of Truro is suggested as being the cause of failure, and if a similar school, with a large laboratory, could be established at Redruth, it might prosper in its attempt to convey elementary instruction to the working miner. It would be unsafe on my part to offer an opinion until the school is established, and the curriculum before the public; but I may remark that, whatever course is ultimately adopted, one thing must not be lost sight of—the miner must be sent to gather and bring to his aid the necessary amount and quality of the exact sciences. These subjects must not be thrust upon him, and he must not be weighed down to a useless speed with schoolmen's logic, which is frequently of very limited application.

The promoters of education in Cornwall will now see that the practical ability of the miner will not admit of him giving his support to an institution which ostensibly professes to teach practical science to practical miners, but which really teaches mining to schoolmasters and demagogues to miners. No systematic teaching of science apart from the practical duties of the mine will ever be available to the miners of Cornwall, and no educational establishment can permanently benefit them which requires propping up by the names of Members of Parliament. When the school, its contents, and subjects taught are of their own choice, then, and not till then, will the Cornish miner feel an abiding interest in its unvarying prosperity. I have no faith in dealing out education by charitable institutions—a process which will deduct as much from the cultivation of self-dependence as the knowledge acquired will add to it. The people will endeavour to attain that which they possess a marketable value. Do the buyers of skill and labour attach any very great importance to abstract science? Philosophy is not, and I fear never will be, wooed by the masses of the people; it is the few only that are captivated by her charms.—May 18.

QUARTZ MINING IN CALIFORNIA.

Sir,—I consider that I have reason on my side when I say I differ very much from "A Cornish Miner" as to the causes of failure of gold mining in California, being one whose endeavours to make, after having proved, that gold could be obtained at a profitable rate, were not allowed to succeed. I will be charitable withal, but I must say that, had all the Cornishmen who came around me and my party, on our arrival in California in 1851, held the opinions that he now holds, much more satisfactory results would have been arrived at; for at last their then ignorant counsels prevailed, and the Merced Mines, which are now returning such good bonuses to their present adventurers, would have still been under the Nouveau Monde Company. However, had their counsels or opinions not been listened to by the Merced Company, the mines would never have fallen under the control of the Nouveau Monde Company, who, it now appears, laid more visible the enclosed riches of what will be at no long date the most celebrated gold mines in the world. We, of course, laid out the method of attack after the most approved rules, subsequent to a proper inspection and thorough belief in their great value being arrived at. That every inch of the lode in the Merced Mines cannot be expected to be equally rich every one must admit. Lodes are not found in all parts equally rich, neither in Cornwall, Mexico, Spain, nor Ireland, nor forgetting Wales or Scotland.

The real desideratum appears to be what class of arrangement of works for reducing the quartz lode stuff, which is composed of—silica, 1815 lbs.; peroxide of iron, 160 lbs.; pyrites, 25 lbs.; and gold and silver, 3,100 lbs. per 2000 lbs. of bulk, more or less, all through California, is to be the most suitable. Stamps of all classes have been tried, light and heavy, without success, unless the quartz is inordinately rich: the system has not been altered under such circumstances. After spalling and crushing in a Cornish crusher to a certain fineness, then sieving and arranging into classes, per fire assays, made daily, I believe I would do much, as I found that the hard part did not contain gold, on making trials to prove this point.

I have, however, confidence in Mr. Bursill's patent process, but from where the first large quantity of carbonate of soda required is to come for us all I am not satisfied, nor for Mr. Squire's process, which, as far as I know, is likewise carbonate of soda, used in combination with heat. Both systems will require heat, and "A Cornish Miner" knows how his countrymen have assisted the Americans to cut down trees, and what part of that alone was used when down; also as to what chance there is of its being replaced; while of coal as yet there is none discovered sufficiently near to the mines.

As to "a riotous living," I must say I saw no such thing; convivial parties, and a glass of count-house brewed to "sweeten and wive," on Saturday evenings, are never considered by a true and manly heart "riotous," even with the addition of a whiff of tobacco, to keep the mosquitoes away. Let "One and All" stand upon state and the truth; no one foresaw that all our buildings and mining operations would cost seven times as much as in England. Even when tried in Old England, in "Linnun town," on the borders of the dirty Father Thames, not forgetting the bye-blow and overflows at Frodoham and other places, although backed by the *Times* and the *Manchester Guardian*, who lent all their powerful assistance, not calling to our aid the other powerful "attractions" which were used, and they were no small "pumpkins," and brought out quite a percentage of gold to the winners, did they succeed? "No," said Echo everywhere.

Will "A Cornish Miner" favour us with the estimate for building a reduction-works, to reduce therein 50 tons per diem of quartz, holding (say) 3 or 4 ozs. per ton. I will help him by stating that such cost in Mexico, a place five times cheaper than California, would be 60,000, to 70,000; in Spain, seven times a cheaper place, the same amounts. In the first named country roads are naturally ready made; in Spain they have to be made; and in California, the roads being so well adapted to well-wishers to mining in California, I have lost everything I possessed in the attempt to assist it, and, therefore, will conclude "feelingly," and will not hide my name, having no cause to be ashamed of it.

London, May 18.

JOHN H. CLEMENT.

COALS AND THE COAL TRADE OF THE UNITED STATES.

Sir,—When I forwarded you the brief article on "Coal, and the Coal Trade," which appeared in your Journal of May 1, you kindly intimated that you would be pleased to receive other articles connected with the iron and coal interests of the United States, when I could furnish them.

The fact that my country possesses three-quarters of all the known coal in the world, and that in developing this she is increasing at the rate of 20 per cent. per annum, insures for us a glorious future. Let me refer to the bituminous coal west of the Allegheny Mountains. By far the most important bituminous coal field is that embraced in the western part of the states of Pennsylvania and Virginia, embracing a portion of Ohio, bordering on the Ohio river. The quantity contained in this patch is vast and inexhaustible, and its location being largely on the navigable waters of the Ohio and Great Kanawha make it one of the most important coal fields of the Union. The advantages of navigable streams on which a heavy article like coal may be floated to market is inappreciable; the cost of transport is very much more than the same kind of coal located where it must be carried any considerable distance by rail. It is known that it can be floated on a river 1200 miles for the same expense which would carry it 100 miles by rail. The country which to a very large extent must be supplied with coal from Western Virginia and Pennsylvania is an empire already. From Pittsburgh to New Orleans the Ohio and Mississippi are 2000 miles long, and they wash ten states of the Union—Virginia, Ohio, Kentucky, Indiana, Illinois, Missouri, Tennessee, Arkansas, Mississippi, and Louisiana. The natural and inexhaustible wealth of this portion of the Union is almost incredible. The fertility of its soil, sometimes several feet deep, its mines of coal, iron, copper, lead, and lime; its high prairie land, where thousands upon thousands of cattle, horses and sheep may graze without restraint; its production of corn, wheat, cotton, rice, and sugar; its facilities for manufacturing; and above all, the fact that the valley is rapidly filling up with the best of all populations, give it an importance second to no other equal area. Half the population of the United States is now west of the Allegheny Mountains, and fully one-third of it in the ten states named, and new states are springing up still further west as if by magic; whilst civilisation in its best form, secured by republican institutions, united with industry and intelligence, is spreading over the whole region, to the very base of the Rocky Mountains. It requires no prophet to foretell the day when one hundred millions of people will dwell in that valley. Cincinnati, Louisville, Memphis, Natchez, Vicksburg, and New Orleans, all large cities besides more than a score of important towns, are situated on the Ohio and Mississippi, and are growing in importance as manufacturing as well as commercial centres, and furnish of themselves a demand for more coal than is mined west of the mountains. The number of steamboats plying on the Ohio and Mississippi is not less than 800, and the commerce of these rivers is enormous. That of the single port of Cincinnati alone reaches \$125,000,000 per annum, and the whole annual commerce of the Ohio and Mississippi, from Pittsburgh to New Orleans, a distance of 2000 miles, not less than seven to eight hundred millions of dollars.

Should all the steamers on these two rivers burn coal instead of wood, they would consume annually at least 700,000 tons—more than one-fourth of all the coal mined west of the mountains. They are obliged to burn wood more than two-thirds of the distance, because they cannot procure coal, and the cost of wood is about one-third more than coal. The depth of water in the Upper Ohio and Kanawha on ordinary occasions is not great, hence boats laden with merchandise for New Orleans or intermediate ports cannot take on board a large quantity of coal at a time. And as the inadequate amount of capital now employed in the business in the West prevents the establishment of depots at suitable points down the river, after the boats have passed the coal beds of Ohio and Western Virginia, these three hundred miles, they are obliged to resort to wood. One first-class packet will consume on a single trip from Louisville to New Orleans and back 1100 cords of wood. But, besides the steamers, there are on the Lower Mississippi about 1000

sugar-houses, which consume over a million cords of wood annually, at the cost of at least four million dollars. Not a single ton of coal is used by any sugar-house, because, with the limited capital in the trade, every bushel is consumed before it reaches them. It may be confidently asserted that if five times the present amount of capital were invested in the coal trade on the Upper Ohio and Kanawha, it would scarcely be sufficient to supply the demand. Any company or parties desiring to do so, would find in favourable locations on Ohio or Kanawha, and provided with ample capital to back upon when business is slack, or to be employed when the exigencies of trade may require—to establish large depots at proper points—to keep their hands always employed, and that always at propitious moments—is perfectly sure to make enormously large profits. In such a country, with such present and prospective demand, nothing but want of capital, and the most reckless and incompetent management, can prevent those who embark in this business from rapidly accumulating a fortune.

A few parties at the present time in the business between Pittsburgh and Cincinnati, with only a moderate amount of capital, are making a profit of from 20 to 30 per cent. It is a matter of wonder to me that British capitalists have not turned their attention to the coal business in America west of the mountains. We have not sufficient capital, and would cordially welcome it from abroad, because it will aid us in developing our country, and, at the same time, occasion no injurious competition. I have heard that some little capital was invested some time since in some western coal property, the results of which had not been satisfactory. Was there sufficient capital in the business? Was it prudently, and economically, and efficiently managed? If not, no wonder it did not answer expectations. But what if one saw American adventure did not prove successful? Have not similar enterprises in England, directly under men's eyes, often proved unsuccessful; and yet does this prevent men from investing more capital, and trying again? Surely not. Why, then, be deterred from American investments of the kind? Honest and competent men can be found to manage the business as to the large profits to the owners, while they really aid us in developing our country.

In regard to iron, I may remark that at several points on the Ohio and on the Great Kanawha, in immediate connection with the coal, there are large quantities of the most valuable iron ore, the manufacture of which in our country is rapidly increasing. I do not now manufacture about half as much as England, and if we only had capital the business would progress much more rapidly. Invite your people, therefore, to come over and help us. I am sure they can be instructed where to make investments which they will never regret.

When I have leisure I will say more respecting coal and iron, and also respecting the manufacture of salt on the Great Kanawha, in immediate proximity to the coal and iron. AN AMERICAN.

MAIN DRAINAGE OF THE METROPOLIS.

Sir,—As to the possibility of separating the fertilising parts of the sewage from the water, so that the latter might flow into the river, and the former be retained and used for the purposes of agriculture, saving thereby the heavy expenses now proposed to be laid on the ratepayers, in a lecture delivered at the Bakers' Farmers' Club, by Alexander McDougal, analytical chemist, Manchester, he said, "There are many desiderata, but they are many of them injurious to the farmer. Chloride of zinc and some of lead would be desirable, but they would introduce a metallic poison into the manure, besides being very costly. Chloride of lime is very expensive, and gives out a most irritating gas, which is highly pernicious to the lungs, and besides this it destroys the ammonia, the most valuable ingredient in manure. Gypsum requires to be used in great quantities, and after action it becomes highly offensive, being itself liable to decomposition. Copperas, or sulphate of iron, is mischievous to animal life, and destroys by insolubly combining with the phosphoric acid of manure, so essential to the nutrition of plants. Charcoal does not do any good, and is a waste of money. The best plan is to use a mixture of being very bad for the farmer, for they all more or less destroy the manure. To obviate this evil a composition is required, consisting of two acids and two bases; sulphuric acid is to remove the offensive smell, carbonic acid to prevent putrefactive fermentation, a little lime to neutralise and dry the carbonic acid, which is oily, and magnesia to combine with and preserve the phosphoric acid and ammonia. This is the theory of the only disinfecting powder available for agricultural purposes, and which during the late war, though lately introduced, was so rapidly found to surpass every other for disinfecting stables, hospitals, &c. Its use in vaults, grave yards, and cellars, is most satisfactory, and so well adapted and pleasant, as to be a mere nominal cost, as no more relief from the most distressing annoyance incidental to the performance of our last duties is to be had."

As there can be no doubt that the whole of the sewage materials are applicable to the purposes of agriculture without any addition or deterioration, if removed direct to the land without entering the sewers, it becomes now necessary to enquire how it can be removed and applied for that purpose at the least cost, without entering the sewers, as according to the present system of allowing the materials to become noxious in the sewers, it appears by the published reports to be impracticable at any reasonable cost to separate the fertilising parts of the sewage from the water, and convey them away for the purpose of agriculture.

I, therefore, beg to propose the use in every house (where convenient) of portable cesspools on wheels, at a level with the yard of the house, to receive the refuse of food, animal and vegetable, and the refuse of fuel ashes, soot, and dust, and, where convenient, the contents of the water-closets (allowing the water to flow into the sewers), to be removed daily by companies, and replaced by empty cesspools.

The present sewers to receive and convey away all the water from every house, and from those houses which have not the means of using a cesspool the sewage also, to the most convenient place, to be properly decomposed with the dust, soot, and other cheap deodorisers, such as clay, lime, and other earths, which will not only be of nutritious properties for the growth of plants, or render it mischievous to animal life. Birmingham, May 17. W. G. ELLIOT.

L'AIGLE D'OR COMPANY.

Sir,—This company, which was brought before the public about five years ago, has, I regret to say, remained nearly in a state of quiescence ever since, and I find that my brother shareholders, like myself, have been kept in a state of ignorance respecting the proceedings of the directors, beyond two or three meetings heretofore referred to. Perhaps it may be within your recollection that the company was originally formed with a capital of 75,000, afterwards reduced to 50,000, for the purpose of purchasing a valuable freehold gold mine, consisting of 430 acres of land, with dwelling-houses and farm buildings thereon, situated in the county of Goochland, in the United States of America; together with 75,000 acres of agricultural land, which vast tract was to be apportioned to the shareholders in the nature of 50 acres to the holder of 50 original shares, suspended to their interest in the gold mine.

Shortly after the company was brought out arrangements were made to commence operations forthwith, and with that view a gentleman of experience in mining transactions was engaged, at a large salary, to go to Virginia with a staff of men, to inspect the mine and report thereon. Some few months afterwards he sent a very flattering report of the working of the mine, together with several specimens of the ore to be assayed, and on the sample being tested it proved to be first-rate in quality, which induced the shareholders to indulge the hope that they were about to enjoy some return of their money; it was afterwards placed in a glass case for the inspection and gratification of the shareholders, which circumstance, of course, tended to engender confidence on the part of the public, and give a sort of impetus to the undertaking, and to a certain extent encouraged the shareholders with the hope that a dividend would shortly be realised, but for some cause or other the operations became suspended, and everything appertaining thereto remains in a state of abeyance; and I cannot but think that great apathy has been evoked by those under whom the management was placed, or the mine might have been worked to advantage, if judicious arrangements had been made with practical skill.

An extraordinary general meeting, it appears, was held on June 8, 1854, at a place of which appeared in your Journal at which meeting the Chairman stated that satisfactory reports had been received by the agent and the agent at the mines, and that resolutions were passed authorising the grant to pay 12500, the balance due to the company, to complete the purchase of the property, and at the same time it was suggested that if the operations of the company were to be extended an additional staff would be necessary before commencing the underground mining; but to accomplish this share would have to be sold to raise the requisite amount of capital, which they anticipated could be done. And the agent also stated that he had reason to believe that the company had received a satisfactory return of the money they had invested, as the company had some hundreds of tons of ore already raised, which by assay produced 27. 6s. to 40. 10s. per ton. And on June 9 in the following year another meeting was held, when the accounts were presented to the board, and after much discussion a resolution was passed for winding-up the affairs of the company.

This being the state of things, and presuming that you might be enabled to throw some further light on the subject, induces me to take the liberty of addressing you. And I should also be glad to know the sentiments of my brother shareholders appertaining to the matter, and if any of them who reside in England attended the last meeting? And if, whether they can inform me as to any definite arrangement has been made in accordance with the foregoing resolution? And, at the same time, I should be glad to have their opinion as to the best means to be adopted to enforce our just claims, as it is almost to suffer the association to perish by inaction, being convinced that unless some prompt and decisive measures be at once put into force the whole affair will be abandoned, with the loss of our capital. I understand that all the necessary machinery, &c., is ready on the ground, and in good working order, and if sold with the mining property would realise a large sum.

Your Journal being the medium we look to in all mining transactions, and knowing your disposition to assist all unfortunate speculators and shareholders, I trust you will kindly give this letter insertion, that I may receive some further information through the columns of your excellent repository of mining intelligence. A SHAREHOLDER.

May 15.

PROGRESS OF MINING—EAST RUSSELL.

Sir,—In discussing this question, we have been diverted from the main course into several personal episodes, more or less interesting; but we ought not to forget the object of our enquiry, which was whether we are so far advanced in the science of lode-reading as to be able to say whether gossans, and certain other appearances presented to us in the surface of veins, enable us to decide, with sufficient accuracy, whether or not they belong to and are the natural consequences of courses of ore. I had all other parts of the discussion as of small value in comparison with that, as upon it naturally depends much of the success of future mining. For myself, with reference to East Russell, I am ready to admit that if the ore discovered by the level from the Tunnel does not hold back under the pen at the engine-shaft, I shall consider all I have said of the mine as entirely founded on wrong hypothesis, and not worth the paper upon which it is written. I speak boldly now, before the trial is tried, and I hope after the trial is made, whatever may be the result, that the solution of the question at issue will only tend to simplify speculation in mining in future. I am inclined to think that we sometimes take too restricted a view of the geological phenomena connected with lodes, and are apt to look for mineralogical changes in every few fathoms of ground along their courses. But if we look to the great formations of rock, we see almost the smallest of them extending for miles without great changes, and for very considerable thicknesses, even in comparison with the depth of our deepest mines. It is nothing uncommon to see a piece of clay-slate presenting a homogeneous appearance at the surface for an area of 1000 miles; and it appears to me when we look out for great changes in every few fathoms of vein, we, in effect, look for a storm in a tea-pot. The circumjacent formations of ore in the lodes in the neighbourhood of East Russell hold for hundreds of fathoms in length, not to say for miles, and are often much more extensive than they are at first supposed to be. Witness the continuous approach of mines towards each other in the lines of lodes running from Padstow to Camborne, and the extension of the ore ground where trials are made from the Padstow discovery. This indicates, I think, that our notions of the general extent of formations of ore are often too limited. If we could see from the surface downward into those parts of metalliferous veins which contain the deposits of ore, in effect, look for those great irregularities in the surface lines of the metals; and as we observe in the looking over a line of fire some of the forks and tongues of smoke, and in an analogous point of view, the ore of the metals come up in some places more or less near to the surface. I have heard of the Devon Great Consols, that although in the first shaft the copper was found 14

PROVINCIAL BANK OF IRELAND.

The thirty-third annual meeting of proprietors was held at the offices of the bank, Old Broad-street, on Thursday, Mr. OLIVER FARRER in the chair.

The SECRETARY read the notice convening the meeting.

The CHAIRMAN said the usual course was, in the first place, to proceed to the election of the directors, who retired by rotation, whose names were—Matthews Wolferley Atwood, Romney Dobree, Jun., Elliot McNaughton, and the Right Honourable Sir John Young, Bart.—The names of those gentlemen having been severally moved and seconded, they were unanimously re-elected.—He (the Chairman) notified that a vacancy had occurred in the direction by the death of their respected friend, Sir Robert Campbell, and that only one candidate had offered himself to fill that vacancy—Mr. Beaumont Hankey, whose name he would put to the meeting.

The resolution having been seconded, Mr. Hankey was declared elected a director.

The SECRETARY then read the following report:—

The directors have much pleasure in reporting, for the information of the proprietors, that the business of the bank for the year which ended on March 27 last was most satisfactory in its results. With improved agricultural management, the prosperity of Ireland continues to advance, and the influence of this on the bank's business has been very perceptible during several past years. Since last harvest the price of grain has declined, and farming profits have consequently been less, but no material injury to the general interests of the country can be said to have arisen from that cause.

There was as usual considerable variation in the reports from different districts regarding the harvest of 1897; but, though the grain crops are believed to have been under an average in acreable produce, they were, for the most part, of good quality and well sown. The potato crop, however, was much less productive than it had been during several previous years.

In a commercial point of view the past year must be remembered as one of peculiar difficulty. Numerous mercantile and bank failures took place in the United States of America, followed by similar misfortunes in this country, and throughout Europe. Some failures occurred in the linen and corn trades in Ireland; but, considering the severity of the pressure elsewhere, it was withstood in Ireland in a manner which showed the general soundness of trade in that country, and the satisfactory condition of the banking interests.

The stoppage of some joint-stock banks in England and Scotland in the month of Nov., when the commercial crisis existed in its utmost severity, occasioned demands for gold upon all the banks in Ireland. These demands were, however, everywhere promptly met, and very soon subsided. Immediately began to flow back again to the banks; and it was satisfactory to remark that the demand, while it continued, did not extend to the commercial classes, who evinced no symptoms of distrust.

Before submitting to the meeting the usual statement of accounts, the directors have to remark that circumstances which have lately come to their knowledge induce them on this occasion to mention that the additional dividends which have been paid to the proprietors during the last few years have been taken out of the current profits of the bank; and as a peculiar legal interpretation has, in some cases, been given to the word "profits," as applied to those additional dividends, the directors think it better to discontinue the use of that word, and to designate future payments of a similar kind merely as additional or extraordinary dividends. The attention of the meeting is now requested to the following statement:—

The account submitted to the last yearly general meeting, in May, 1897, showed the amount of rest, or undivided profits, on March 28, 1897, to be.....£225,914 17 9
Out of which there were paid to the proprietors an extraordinary dividend of 6 per cent. at Midsummer, 1897, and a second extraordinary dividend of similar amount at Christmas, 1897, making together the sum of .. 64,800 0 0

Leaving a balance of£161,114 17 9
And there has been further deducted the amount of two half-yearly dividends paid to the proprietors, as follows:—At Midsummer, 1897, 21,600; at Christmas, 1897, 21,600; together.....£ 43,200 0 0

Leaving of the rest of last year a balance of£117,914 17 9
To which there has since been added the amount of net profits for the year ending on the 27th of March, 1898, after deducting property tax, and providing for all bad and doubtful debts..... 116,468 13 3

Making the amount of rest, or undivided profits, on March 27, 1898, £234,383 11 0
It may be remarked that the profits shown in the above account fully equal those of last year, which exceeded those of any previous year; but the proprietors will bear in mind that though this is attributable in some degree to an increase of the bank's business, it must be considered as arising chiefly from the high rate of interest, and continued exemption from losses of importance.

It is with much gratification the directors on this occasion present to the proprietors a state of affairs so satisfactory as is exhibited in the above account; and it is now their pleasing duty to intimate their intention to pay, in July next, an extraordinary dividend, of equal amount to that paid at the same period last year—30s. on each 100l. share, and 12s. on each 10l. share, of the capital stock of the bank, in addition to the usual half-yearly dividend of 4 per cent., making the amount to be then paid 2l. 10s. on each 100l. share, and 1l. on each 10l. share, for the half-year ending at Midsummer next; and they propose also, as heretofore, to pay the property tax for the proprietors.

The CHAIRMAN said that the report which the proprietors had heard read needed, on his part, very few words in the way of commendation to secure its acceptance and approval. (Hear.) It was, perhaps, the best report that, during the period of 33 years, they had been prepared to lay before the proprietors. When they considered the extraordinary period they had passed through, the results were such as hardly any reasonable man could have imagined, or have anticipated. (Hear.) He should make very few observations on this occasion, because, to use a homely phrase, "Good wine needs no bush;" and, after the sample which had been produced, he hoped the proprietors would be satisfied. All matters referred to in the report were really of an encouraging and pleasing nature.

They were enabled to allude to the improved condition of Ireland in every respect; for though there had been a decline in the price of agricultural produce, there was every reason to believe that there was no country in Europe, or he might say in the world, that enjoyed such quiet comfort and happiness. Ireland, as she was now presented, a beautiful comparison to what she was not many years since; and he hoped and trusted that that prosperity and contentment would long continue, because he could not but flatter himself that the introduction of joint-stock banks, of which this was the first, had been instrumental in forwarding the interests of Ireland in every respect. They had had a most extraordinary year to pass through. A demand, he would say a most senseless and useless demand, for gold had at one time sprung up in Ireland, not only among the commercial community, indeed, for they showed no symptoms of distrust. (Hear, hear.) From whatever cause the demand referred to might arise, it became necessary that the bank should be on their guard to meet it at every point. They were well prepared, and this bank among the rest. This demand came on at an unfortunate time, when the monetary and commercial pressure was so severe that even a small abstraction of gold from England was very inconvenient. But they had only one course to pursue, and that was to keep up an ample supply of gold at all their branches. When the demand for gold was made (for he could hardly call it a run) their circulation was 1,100,000l., and they had in specie about 430,000l. When the demand for gold ceased entirely, their circulation had gone down to 930,000l., but their specie was 550,000l., so that as their circulation decreased their gold increased, and so they could have gone on till every note was paid. The only thing he had to lament was, that in order to procure the gold they had to realise Government assets, which were then depreciated in value. Since then they had re-invested the amount, and there was to be taken into account the cost of difference between the sales made and the cost of re-investing, which constituted the whole loss. Every gentleman knew that a certain portion of the money of the bank must be employed in London, and he was happy to say that during the whole of the crisis they had not incurred a loss of one penny. (Hear.) He thought it must be gratifying to the proprietors to know that this establishment had taken deep root in the good feeling and confidence of the people of Ireland. The number of the proprietors at this time was 99, and of that number 679 were resident in Ireland. (Hear.) He thought that spoke volumes as to the opinion in which this bank was held there. Of the whole of the proprietors a large proportion were ladies (hear)—and, therefore, it was more than ordinarily incumbent on those who conducted the affairs of the bank to take care that, whilst they gave them a fair share of the profits, they should do everything in their power to secure them from loss. When this bank was newly established, they were obliged to obtain their officers from England and Scotland, but since then the object was that the banks in Ireland should be managed by Irish gentlemen. They were, therefore, anxious that any gentleman in the neighbourhood who was interested in any young man could write a good character and account, and who was capable of presenting a fair examination, should be enabled to introduce him into the bank. They had taken in many learners, or probationers, as they were called, who were now filling high positions in the bank, with credit to themselves and advantage to the establishment. The number of their officers, including porters, in Ireland was 245, and of that number 202 were natives of Ireland. (Applause.) He did not know that he need trouble the meeting with many further observations. They would observe, it was submitted in the report that the large amount of profits on the year was attributable to the high rate of interest which ruled, and to their having, formerly, made very few and small dividends, and for this they had to thank the good establishment (hear)—and though they did not mean to give a bonus, but an extra dividend. An extraordinary idea had arisen in Ireland, and had even reached the Bench, that a bonus was, strictly speaking, an addition to the capital, and that, therefore, if a person possessed shares for life he was only entitled to the interest, the bonus going to the reversion of capital. It happened that every bonus this bank had made had been paid out of the current profits of the year, with the exception of the first time they made a bonus, which was in the year 1836, and then it was paid from the accumulation of small profits of several years before. It did not arise from the profits of the year; it was not strictly so, but they gave 100l. shares, which, of course, went to the increase of capital. But there was no question of a dividend, whether they called it bonus or dividend, it made no difference; it was a participation of profits, and they would henceforward avoid the word bonus. When they met last year, it was stated that it was intended to pay a dividend of 20 per cent., and they did not hold out an expectation that it would be as much in January; but though they had passed through an awful crisis, looking to the profits which had been made, they thought it would be unjust to withhold it, and in July they would pay the same amount. At the end of March, 1896, their undivided profits were 196,000l., out of which they had paid two 4 per cent. bonuses. In 1897 they advanced to 225,000l., and out of that 225,000l. they had paid a dividend and bonus of 20 per cent.; and instead of diminishing the rest it was now 224,000l. He, therefore, hoped he might congratulate the proprietors on the position of the concern. The board would continue to use their best exertions, and he trusted they would again meet the proprietors hereafter with equally good reports. He begged to move that the report be received, adopted, printed, and circulated.

The Rev. J. LAWES was most happy to second the resolution, and stated that since he had last attended the meeting he had gone through Ireland, and it had been very satisfactory to him to hear of the high credit in which this bank was held from one end of the country to the other. A remark was made to him by a retired officer of the establishment, who, speaking of Mr. Murray, the chief officer, said that it was more than their heads were worth to make a bad debt, so vigilant was that gentleman in his superintendence of those who were under his guidance. With reference to the run upon the banks, there was no doubt that the unfortunate affair of the Tipperary Bank was the precursor to an universal panic, out of which this bank came with unshaken credit.

Mr. HENRY BRETT, as proprietor of a few shares, but an Irishman, begged to bear testimony to the zeal and ability of the officers of the bank, and he should respectfully propose that a more substantial compliment than a vote of thanks, however gracefully proposed, should be paid to those gentlemen. They had a large amount of rest, and if

what he suggested were carried out it would give much satisfaction to a great body of shareholders in Ireland.

The CHAIRMAN said that nothing could be more gratifying to the board than to hear their officers thus highly spoken of. He hoped and trusted that there was not a single person connected with the bank whose merits were not considered from time to time; and, when their merits entitled them to it, they were always met in a liberal spirit. No establishment was better paid, and he believed general satisfaction was expressed by those who were in their employ. Every year these matters were taken into consideration by what was called the "appointment committee." Last year an addition was made to the salaries from the highest to the lowest.

The question was then put, and carried unanimously.

Mr. SIMON WARNER begged to draw the attention of the meeting to the subject of the salaries or remuneration to their excellent directors. He did not know what they received, but he was ready to sing their praises, and he proposed that 1000l. a year be added to the remuneration of the directors, making it equal to 3000l. a year for each member of the board.—Mr. PHILIP TWELVE seconded the motion, which was carried with acclamation, after a few words from the Chairman.

On the motion of the Chairman, a very cordial vote of thanks was given to Mr. Murray, Mr. Hewat, Mr. Proctor, Mr. Christie, and the other chief officers of the bank.

The compliment was briefly acknowledged by Mr. Hewat.

A vote of thanks to the Chairman and directors was carried with applause, and the meeting separated.

STANNARIES' COURT.

At the quarterly sittings of this Court, held at Truro, before the Vice-Warden of the Stannaries, Mr. Edward Smirke, the following motions were made in equity:—

TYWARTHHAILE MINE—JEFFREY AND ANOTHER v. DALE.—In this case the plaintiffs were Mr. Isaiah Jeffrey, of Truro, and Mr. Alfred Jeffrey, of Queen-street, Cheapside, carrying on business at Truro as brass and iron founders, under the style or firm of Alfred Jeffrey and Company. The defendant was the managing agent of Tywarthhaile Mine. It was a creditor's petition against the mine for recovery of 448l. 5s. 9d., for goods and materials supplied by plaintiffs between May 1, 1897, and Feb. 10, 1898. Mr. Hockin, on behalf of plaintiffs, moved for a decree for payment, and said his clients would accept payment as follows:—one-half of debt, 224l. 2s. 10d., to be paid on May 19, and the rest by three equal instalments of 74l. 14s. 3d., to be paid on July 19, Sept. 19, and Nov. 19. Mr. Roberts, for defendant, consented to the decree, and for payments to be made as stated, the costs to be paid with the instalments.—The Vice-Warden made the decree.

GREAT WHEAL VOR UNITED MINES—ALLISON v. CURTIS AND OTHERS.—Mr. Roberts said that this was a pursuer's petition against several defendants for recovery of calls. He had to move for a decree against Mr. Charles Trueman, trading under the style or firm of Cotton and Trueman, the costs due amounting to 125l.; and also against Messrs. Schneider, Trueman, and Rankin, for 625l. He believed Mr. Stokes would consent to a decree for payment in seven days.—Mr. Stokes said he consented to the decree on the part of defendants. Mr. Trueman was the Member for Helston, and the proceedings were merely for obtaining a sale of the shares, and did not affect him personally; he was sued in his representative capacity as a trustee. There was a petition also against him in respect of his individual shares, but that amount had been paid.—The Vice-Warden granted the decree.

WHEAL TALLACK (St. Agnes)—JEFFREY v. LORD CLINTON.—This was a pursuer's petition by Mr. Jeffrey, 28, Queen-street, Cheapside, against Lord Charles Pelham Clinton, as an adventurer, for the recovery of costs in arrears to the amount of 300l. Mr. Hockin moved for a decree for payment, and Mr. Roberts, for defendant, consented thereto on condition of paying 100l. on May 19, and the balance in five equal instalments on the 19th day of the following five months, with costs.—Decree granted. In another case of the same plaintiff, as pursuer of Wheal Guskus, in St. Hilary, against defendant for recovery of 300l. costs in arrears, Mr. Hockin moved for a decree for payment; 200l. to be paid on the May 19, 1900, on July 19, and the balance by equal instalments of 25l. per month on the 19th of each succeeding month. Mr. Roberts consented, and the decree was made.—In a third case of the same plaintiff, as pursuer of Rosewarne Consols Mine, against the same defendant as an adventurer, for recovery of 600l., calls in arrears, Mr. Hockin moved for a decree for payment, and said Mr. Roberts would consent to the following arrangement:—250l. to be paid on May 19; 250l. more on June 19, and the remaining 100l. on August 19, with costs. The Vice-Warden said he understood the arrangement was that the costs were to be paid *pari passu* with the principal sums, to which Mr. Hockin replied in the affirmative. Mr. Roberts said, on behalf of defendant, he consented to the decrees in these cases, it being understood that where a less sum was taken than the claim, it was to be received in liquidation of the whole debt. Thus, in Wheal Tallack, the claim for costs was 360l., and the plaintiff accepted 300l. In Wheal Guskus the claim was 625l., and the plaintiff accepted 500l. Mr. Hockin said the amount taken was in satisfaction of the whole claim. The Vice-Warden granted the decree.

CAMBORNE VEAN AND WHEAL FRANCES—VAUDREY v. BURTON AND WIFE.—A pursuer's petition for recovery of costs, on which a decree had been granted for payment in seven days from March 31. Mr. Hockin moved, on affidavits of service and non-payment, for an order absolute for sale of shares.—Rule absolute granted. In the case of another petition by the same plaintiff against the same defendants, for recovery of costs in Stray Park Mine; an order had been made for payment in seven days, and Mr. Hockin, on affidavits of service and non-payment, now obtained a rule absolute for sale of shares.

NORTH GRAMBLER MINES—PIKE v. LE BRETON AND ANOTHER.—Mr. Hockin said an order had been granted in this case, but the defendants having gone abroad, all order to serve them had proved futile, and he moved to extend the time for service. He moved for an order that the costs in this case might be adopted.—The Vice-Warden said he would make the order on an affidavit being filed to show why service had not been effected. In another case, of Cardono v. Loxton and Others, a petition by the pursuer of South Grenville Mine, Mr. Stokes made a similar application to the above, with a like result, in regard to extending the time for service on defendant Loxton, who had removed from Exeter to Swansea.

ST. COLEMAN TRESAVAN MINE—WEBB v. POLKINGHORNE AND OTHERS.—Mr. Chilcott said this was a pursuer's petition for recovery of costs. All the defendants had met the claims against them, with the exception of a defendant called William Len ton, whose shares had been sold under an order of the Court, and realised 3l. 12s. There was still a balance remaining due from him of 10l. 10s. 7d., and he (Mr. Chilcott) moved, on the certificate of the Registrar, for an order upon the defendant to pay the balance, the motion being under the 119th rule of the Court.—The Vice-Warden granted application.

SAMPLERS' FEES AND TICKETING DINNERS.—At the Tavistock County Court, Mr. Ash sought to recover 10l. 3s. 9d. from Captain John Spargo for dinners supplied to the defendant and others on account of Great Sheba Mine. The result of a verdict for the defendant would be the abolition of about the only existing custom which tends to promote friendship and unanimity amongst miners. There is an old saying with reference to the very common practice of "saving at the spigot and wasting at the bung-hole;" perhaps it would not be altogether inapplicable in the present instance. For about twelve months the plaintiff has been an inn-keeper at Calstock, and the captains and samplers have held their dinners there on sampling days.—Mr. Bridgman, solicitor, said that the defence was that the adventurers had received no particulars of account, and denied their liability, on the ground that the samplers and others had received no authority to run up such a score.—Captain Spargo thought the claim was a great imposition, but would not have objected to pay the debt if the adventurers had not refused to refund it to him.—The various statements of the defendant led the Judge to remark that it was quite clear that there was a custom among the miners to have a dinner on the sampling days, and that each mine afterwards pays its share of the expenses.—Mr. Richard Walters, the clerk at Hingston Down, confirmed the opinion of the Judge. The case was adjourned, Mr. Bridgman remarking that the claim would be, no doubt, paid before the next court day.

CORNISH MINING.—Capitalists should at all times thoroughly consider the relative merits of the several classes of security offered in the market; more especially as so many opinions are entertained, according as the adviser is interested in one or the other description of stock. The stock-brokers recommend Consols, unless specially connected with the railway market; and the railway shareholders declare that there is nothing equal to guaranteed and preferential railway shares. Fortunately, however, mining has its advocates, and the task of proving that it is by far the most desirable channel for investment is by no means difficult. The second edition of Mr. R. Tredinnick's *Review of Cornish Copper Mining Enterprise* has just been issued—the information upon the various dividend and progressive mines of Cornwall and Devon being brought down to the present month. He introduces the subject to the reader with the observation that it may be asked, with great propriety and consistency, what description of securities equal Cornish copper mines (judiciously selected and worked), or can compare with them as regards the chances of enhanced market value? The shares of joint-stock banking companies afford the nearest approximation, but risks are far greater and more numerous. The fearful responsibilities that attend shareholders in those concerns, even for three years subsequent to the date of transfer of shares, involve the necessity of severe investigation, with great hesitation, before embarking even in the best and safest of such institutions. To make mining investments pay, the exercise of sound judgment, practical knowledge well applied, good localities, and ample capital are indispensable; then, with hope as a talisman, perseverance is the guarantee of success. Nine-tenths of past losses in mining investments can be traced to schemes without promise; nay, in numerous cases, devoid of the very elements essential to success. Mr. Tredinnick very fairly states that his object is "to disseminate correct intelligence and data, and thus promote legitimate mining adventure, and at the same time to extend his business as a mining engineer and sharebroker in quarters whence the peculiar and unusually large profits resulting from Cornish copper mining are up to this date unknown." The review is accompanied by several well-executed maps, which render the explanations more easily understood; and the style in which the information is given is sufficient to recommend the treatise to capitalists of all classes, and also to those interested in the development of our mineral industry.

Mr. James Crofts sends us the following remarks:—

In the absence of stirring incidents, commercial, political, or monetary, it gives the writer much pleasure to note a considerable improvement in the mining market in almost every description of stock, dividend or progressive, tin, copper, or lead. For the latter there has been considerable extra demand, such as for Mary Ann and Trelawny, and at advanced prices. Tin and copper shares may be considered as stationary in character, and, consequently, the transactions are still in favour of buyers. Another small advance in the standard for copper is just announced, which, as an indication of the continued upward tendency of that metal, is calculated to give freshness if not immediacy to draw more attention to the larger producing mines, to enhance their value in the hands of holders, and to increase the pretensions of sellers. We must look also, sooner or later, for the good effects upon the trade of the country which the present highly favourable weather cannot fail to exercise, and to the impetus which will be given to consumption by low prices to agricultural produce, and, in particular, to its effects in the mining districts, where, of course, the larger portion of the miner's expenditure being for the necessities of life, a corresponding reduction in mining costs must follow.

We have several times referred to Okef Tru Mine, in Cadzow, as progressing satisfactorily. They have now 160 to 180 tons of copper ore ready for sampling on the 25th inst., and valued at 4l. to 5l. per ton. The report from Virtuous Lady and Wheal Beddard, dated 19th inst., announces a most important discovery in the level from the south side on the Bedford side, of "splendid stones" of tin from the gossan, and about 2 feet wide. The captain designates this as a "magnificent discovery;" but further details are promised on an early day. The next dividend of Vale of Towy will be declared about June 13. No mine can be making more satisfactory progress, and there is a very extensive business doing in the shares, all in favour of buyers. The new mine lately introduced into the market called "Wheal Florence," in 6000 shares, finds favour with the public; one item in the constitution of which is that one-third of the capital raised (6000l.) is to be applied to the working of the mine. The promoters, however, are not very anxious to dispose of shares, and nothing can be done in them under par. A test of the value of the silver raising will be applied by the sale of 7 tons of the ore this week, valued at 400l. It is predicted by practical parties, well acquainted with the Tavistock district, that for years to come, and when they have taken a fair start, Devon and Cornwall, Old Cornish, North Wheal Robert, and North Tavy will be profitable mines, and there are hopes of Sortridge Consols in the lower levels. A mine called "Chulicat" appears to have its destiny settled by the fact that the "outcrops" of the mine, which runs through it, no lodes have appeared; but it may be helped hereafter by cross-concave lodes in depth. Croakale is reported as looking unsatisfactory, and nothing can be seen of lodes in the cutting cast of it; the mine, however, still ranks at 60,000l. in value, or about equal to Alfred Consols, upon which 12,000l. was spent before it came to dividends. Dale Mine hold their meeting on the 27th; the shares are scarce, but steady in value. At the said meeting an interesting question must arise as to who are the individuals to whom the management will in future be confided? South Lady Bertha is a new mine, immediately adjoining Lady Bertha, in 6000 shares; and, from the appearance of the hole and the excellent ore produced from it, much the better known. A controversy of some warmth has sprung up touching the real value of Wheal Edward, the opponents of which assert that the mine is not only at present poor but is likely to continue so; predicting, as a consequence, that the shares are much above their value. The parties of Edward, and they are very numerous, on the other hand, contend that the falling of the production of ore is but temporary, and reasoning upon well-established data that improvements in the mine are a certainty, besides which they lay stress upon the important fact of the very large interests held at high prices by parties competent as practical men to judge of the value of the mine. Whatever may be the weight attached to the opinions of either party, there is no doubt that the property has been temporarily injured by a premature dividend declared at the last meeting; and it is possible that too sanguine a view has by some been heretofore taken of its real value; but even ranking the mine as errors, they are by no means irreparable. In the mean time, the shares are very firm, a considerable demand, and fully worth 5l. and appear more likely to advance than decline. The report of the week is also of an improved character. The sale of ore on Thursday (18th inst.) produced 781l., or 4l. 6s. per ton, as against 5l. 7s. 11d., the average for the first quarter of the year.

The writer regrets being compelled to return to the subject of advertising shares to him, by noticing that in the list of advertisements in your last Journal (Mr. G. Moore) there is a notice of a mine in Catherine and Jane "for sale, or any part, free of any commission," but, on being applied to by a buyer, the advertiser alleged "that he could not name a price," and consequently no business was done. Of the good faith exhibited in this instance the public will be able to form their own opinion. The same party is also in the habit of advertising shares at fractional prices; as, for instance, Vale of Towy at 22s. 10d.; or the West Grenville at 6s. 10d. per share—probably with the view of initiating the readers of the Journal into the mysteries of fractional rates of profit, or commission. However, without wishing to be offensive to the individual in question, we submit that the practice applied to such business as mining investment is without dignity, and calculated to lower, instead of raise, the business in the estimation of the public; and, indeed, according to the writer's views, more applicable to dealers in mail wares under the deteriorating influences of competition.

Mr. Peter Watson gives the following summary in his "Circular":—

During the period extending from January, 1846 to 1897, Cornwall and Devon have afforded many remarkable instances of large and rapid fortunes being acquired upon comparatively small outlays, and among the most conspicuous are—Devon Great Consols, 1024l. outlay, against profits of 609,280l., and market value of 475,000l.; Wheal Seton 21,184l. outlay, 60,896l. dividends, and market value 29,700l.; South France 9393l. outlay, 137,578l., and market value 109,150l.; Alfred Consols 13,620l. outlay, 92,116l. divs., and market value 61,450l.; North Basset, with a trifling outlay of 80,400l., and market value 66,000l.; West Basset 9000l. outlay, against divs. of 75,000l., and market value 132,000l.; West Seton, Great South Tolgus, Clifford, Wheel Bule are also distinguished instances of success. These two counties have afforded us 113 dividend companies during the period specified, the aggregate outlay upon which was 1,402,924l. against divs. of 3,857,569l. 10s., and market value 2,714,500l. In addition thereto, 34 of these (115 companies) had paid previously to 1846 the further sum of 2,707,686l., forming a total of 8,479,755l., being an average profit of above 500 per cent. in addition to outlay incurred.

SALE OF CARADON SHARES.

The sale of shares in this celebrated mine, occasioned by the death of the late proprietor, may be considered as an index of public feeling in Cornwall; at all events, of the stability of its some confidence in the mining pursuits of this great county. The attendance was large, the biddings spirited, and after the sales all the shares could have been re-sold at a "vantage."

The first share offered made a response of 386l., which advanced to 395l., at which it was knocked down to Mr. Gilbert, a clergyman.

The next commenced at 393l., and went to 394l., 395l., at which it was sold to Mr. Snell, a farmer.

Lot 3 commenced at 350l., and sold at 395l. to Mr. Brian, also a farmer.

Lot 4 began at 390l., and advanced to 395l., when the hammer dropped to a Mr. Isaac, merchant.

Lot 5 produced at first bid 390l., which improved to 395l., to Mr. Rabey, also a farmer.

Lot 6 fetched 394l. from Mr. Denham, who immediately sold at a profit.

The sale of these shares was followed by four shares in Mary Ann Mine, the biddings for which were as follow:—No. 1, first bid, 40l. to 45l. 10s.; No. 2, 44l. to 45l. 10s.; No. 3, 44l. to 45l. 10s.; No. 4, 44l. to 45l. 5s.

Now, these particulars may be of service, showing as they do, first, the condition and opinions of farmers, who seldom become mine adventurers without substantial reason, preferring two acres of land to one of mining property; and next, that there are capitalists even in Cornwall who prefer 10s. to 25s. per cent., and who seek reward in mining returns. It is really gratifying to see Cornishmen entering the field in this manner, as it will give confidence to "out-adventurers," and, perhaps, move them from their apathy.

The purchasers of Mary Ann were chiefly farmers and miners (also a good sign); few gentlemen from "the up-country" were present, yet the competition was good, under the auspices of the auctioneer, Mr. Dony.

MUSEUM OF ECONOMIC GEOLOGY—WORKING MEN'S LECTURES.—Dr. PERCY, on Monday, delivered the fifth lecture of the metallurgical course, which treated of "the Conversion of Pig Iron to Bar-Iron." A short history was given of the manufacture of iron previous to the system of puddling by the late Mr. Henry Cort, the various improvements subsequent to that period were alluded to, the utilisation of the blackback by the late Mr. Mushet, as well as the introduction of the hot-blast by Mr. Neilson in 1830; this was first adopted in Scotland; so economical was its application that it enabled them to reduce the fuel from 7 tons to 2 tons; here the blackback was available in 1830, previous to this system being introduced, they had only been able to reduce about 37,500 tons annually, in the year 1839 the amount produced was 290,000 tons, and 12 years afterwards this had amounted to over 700,000 tons. Several analyses were then given of the different ores, that of Northamptonshire being specially referred to; the differences of hot and cold-short iron were lucidly explained. Among the experiments which were exhibited was one illustrating the Bessemer process, which the lecturer observed had created some great stir. Dr. Percy said this was a clever invention, and was highly creditable to the research and industry of Mr. Bessemer. Unfortunately, they had not been able to reduce the phosphorus in the iron, and this was to a great extent detrimental to the metal. In his concluding lecture he shall speak of the manufacture of steel, which the lateness of the hour that evening precluded him from entering upon.

DR. MUSPRATT AND THE UNIVERSITY OF MARYLAND, U.S.—At the last meeting of the Senate, the honorary degree of Doctor in Medicine was conferred upon Sheridan Muspratt, F.R.S., the distinguished British chemist, in appreciation of his devotion to science.—*Herald.*

THE EXPOSED AND DANGEROUS STATE OF ABANDONED MINES.—An inquest was held at Holmshush, in the parish of St. Austell, before Mr. Hamley, county coroner, on the body of William Hooper, a labourer, aged about 58 years. It appeared from the evidence that the deceased called at the Cottage Inn, in that village, on a fine evening on the night of Jan. 4, and being at the time very tipsy, he was released by Mrs. Inch, the landlady, who, he learned from the inquest, was immediately, with the intention of going to his home (a very short distance), saying his wife could not get in as he had the key of the door in his pocket. He has been missing ever since until Saturday last, the 8th inst., when his body was discovered in an old open shaft (without any fence of any kind around it), within 50 yards of his own dwelling. A very partial search was made for him without success, within a few days after he was missed, and it was generally thought that he had left the neighbourhood. It appears that for several weeks past the inhabitants of the village of Holmshush have complained that there was a very foul and offensive smell, as well as taste, with the water they have been drinking. It was resolved to examine the levels through which the water flows, to ascertain the cause, and on two men doing so, on Saturday last, they found the body of the deceased lying on his face in the water-course, at the bottom of the shaft, as above stated, where it must have been lying for the last 18 weeks. The body was in such a state of decomposition that it was with difficulty brought to the surface. It was stated at the inquest by one of the jurors, that in the opencroft or down, wherein the body was found, (the site of the abandoned Charlestown (Uff) Mines), a space of about 14 acres of land, there are at the present time nearly 40 open shafts without any fence or security whatever to prevent a similar accident, and close by several of which shafts many miners have to go at all hours of the night to their labour at the neighbouring mines, there being a great number of scattered dwellings all around (principally inhabited by miners), and it being also the common roadway by numerous cross paths to the chapel. The stream of water in which the body was found, and where it has been lying for such a long period, is the only source from which, in summer, not only the whole of the inhabitants of Holmshush, but a great number of others in the neighbourhood at present receive their only supply; and the coroner, at the request of the jury, promised to see the steward of the lord of the manor (Major Caryon, of Tregrehan), and represent to him the danger to which the inhabitants are subjected, both by the unprotected and open shafts, and from having to use impure and unwholesome water.—*West Briton.*

Mining Correspondence.

and northerly bearing.

Minings begun for the Month ending, March 27:—San Pantaleon: San Vicente level has been extended to 100 ft. wide, and 4½ vara, at \$5 per vara; the lode in this end is 1 ft. wide, and at present poor. The consequence of this is, that the lode in the San Damasio level, produced by a horse of ground, which came in about three feet below, there has been only 2 varas driven east on its course, by two men, at \$5 per vara. Deeper, has been occasioned by cross-cutting and driving on branches to discover the direction of the lode. I am sorry to state, has not yet been satisfactorily proved; consequently, instead of 100 ft. I have set a rise in Dolores level some 6 varas in advance of the present end; this will be held to be correct, as the lode is not, when the end is advanced the before-mentioned number of varas, and being in the same course of the lode, must clear the doubt as to its position. In Dolores level 2½ vara has been driven east, by two men, at \$7 per vara; the lode is 20 in. wide, and contains a little ore. I am afraid that there will not be any material alteration take place in the vein until the San Damasio level has been extended some 1¼ vara. The winze sinking from San Vicente to San Damasio level has cost some 1¼ vara of winze, at 2¼¢ per vara; the lode is from 15 to 18 in. wide, presenting very nominal appearance, and is improving as the winze is deepened. No. 1 stope, in the back of San Damasio level, has been worked by two men and a boy; the lode here is still looking well, and is 12 cwt. of rich ore per fathom. In No. 2 stope, in back of San Damasio level, the lode, which is not yet improved, has been worked by two men and a boy per fathom, wrought by two men and a boy. The ore is good, the lode, in back of Dolores level, is 4 in. wide, and will produce from 6 to 7 cwt. of rich ore per fathom. The ground is rather hard in this stope.—Dressing Department: Since Feb. 27, 21½ tons

Messrs. Von Dadelszen and North write (May 21)—“We have to-received advice, per telegraph, that the sale of tin by the Dutch Trading Company, be held on the 6th of July next, at Rotterdam, and consist of 183,034 slabs, with lib to add 10,000 slabs, if arrived in time. In lots of 500 slabs each, prompt 6th of S and no further sale to take place till 1st June, 1856.”

BRITISH MINES

CASTELL.—F. Evans, May 17: The 10, east and west of the engine-shaft, are now being driven by a full number of men in each: the ground in both these levels being h

The lead lode, during the past week. The lode in the 70 winze, on gradually improving, it is now opening tribute ground. The lode in the 70 winze, on Kelly Run, is disordered by a cross-branch, consequently it is at present poor; but no doubt it will again prove productive as we get through the disordered portion of the lode. The 80 east, on Kelly Bray lode, is still producing a quantity of munda spar,

present; everything seems to indicate and promise future success; the mines themselves, too, are in the most satisfactory position. Few, if any, of the wild speculations so rife and ruinous at periods of prosperity are in the market. Adversity has taught all the necessity and practice of economy, which is now the rule and not the exception. Our list of dividend mines gradually increases; many are on the eve of entering it, many more are just paying their way. It will be noticed by the attentive observer the calls on mines requiring advances are much less than heretofore. We can assure our friends and capitalists generally mining is in a thoroughly sound state as a whole, and that state is founded on a basis as legitimate and enduring as any kind of security whatever. In taking this view of the matter we would, however, warn them against being led away by false statements and gilded gags, for such there are and such there will be, if an overdone excitement prevail, which is not at all improbable. The public are so prone to extremes that it is difficult to restrain it, more particularly when a mania for getting suddenly rich possesses it; however, as yet, no symptoms present themselves; should they, we shall deem it as much our duty to curb them as to encourage legitimate pursuits. We repeat, we hail the improvement in the standard, small as it is, as a step in the right direction, and a gratifying augury for the future.

At the sale of copper ores at Truro, on Thursday, the standard was 1301. 9s.; produce, 51; price per ton, 51. 5s. 6d. Taking into account that this was the sale of Devon Great Consols, and other eastern ores, and that the expense of carriage is greater than from the western mines, this may be considered an advance on the standard of the previous week, though not to the amount of more than about 11. 5s. In comparison, however, with the previous monthly sale, on April 22, of Devon Great Consols and other eastern ores, the advance at the sale on Thursday was considerable, amounting to 61. 2s. on the standard, and 7s. per ton of ore—making a difference, to the advantage of the miner, on the total sale of 4855 tons, to the amount of 16391. more than same ores would have realised at the sale on April 22.

From Melbourne, by the ship *Guy Mannering*, 8575 bags of copper ore and 1857 bags of silver ore have arrived. The *Granite City*, from Sydney, has brought 4094 bags of copper ore. The *Briston*, from Adelaide, brings 1588 tiles, 995 cakes, and 28 ingots of copper, besides 1880 bags of copper ore.

At Liverpool, yesterday, about 185 tons of copper regulus, ex *Blencathra*, were sampled, for sale on June 1.

At Wheal Buller meeting, on Tuesday, the accounts showed—Balance last audit, 17407. 6s. 9d.; ore sold (less dues), 56647. 0s. 11d.; 74047. 7s. 8d.—Mine cost, March, 1857, 2s. 6d.; April, 1857, 11s. 1d.; merchants' bills, 9457. 5s. 1d.; income tax, 100. 0s. 0d.; leaving balance in favour of adventurers, 41017. 8s. 8d. A dividend of 25600. (100. per share) was declared, and after payment the balance to next account was 15417. 8s. 8d. The net profit on the two months' working was 23617. 8s. 11d.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their weekly board meeting, held yesterday, declared a dividend of 81927. (84. per share) out of profits arising from sales of copper ores sampled in the months of Jan. and Feb. last. After payment of the same, there remains in hand a balance of 26,062. 13s. in cash, ore bills not at maturity, and reserved fund, applicable to the general purposes of the company.

Carn Brea Mines declared their 97th dividend, of 21. per share, yesterday—making 2417. 10s. already paid on each 151. share.

At Levant Mine meeting, on Tuesday, the accounts showed—Balance last audit, 9187. 1s. 9d.; tin sold, 33257. 4s. 1d.; copper ore sold, 13890. 17s. 4d.; carriage, 1807. 0s. 1d.; sundry receipts, 2. 2d. 3s. 3d.; 59417. 16s. 6d.—Mine cost and merchants' bills, Jan. to March, 1858, 3s. 10d.; leaving balance in favour of adventurers, 16577. 7s. 8d. A dividend of 3. 2d. (21. per share) was declared.

St. Ives Consols during the week has declared a dividend of 30s. per share.

At Wheal Buller meeting, on May 11, the accounts showed—Tin ore sold, 1890. 0s. 1d.; 1/2 of stamps, &c., 131. 1s.; call received, 1201. 10s. 10d.—Balance last audit, 4097. 7s. 6d.; mine cost, Jan., Feb., and March, 8527. 3s.; dues, 347. 8s. 8d.; merchants' bills, 3407. 3s. 3d.; leaving balance in favour of adventurers, 1767. 19s. 5d. A dividend of 10s. per share was made. Capt. H. Trease and J. Bennett reported that they had 25 pitches working, by 64 men and 9 boys, at an average tribute of 15s. 8d. in 17.

At Berriow Consols meeting, on Tuesday, the accounts showed—Balance last audit, 1097. 14s. 8d.; labour cost, 2097. 10s. 11d.; merchants' bills, 797. 0s. 10d.; 1/2 of stamps, &c., 131. 1s.; call received, 1201. 10s. 10d.—Balance last audit, 4097. 7s. 6d.; mine cost, Jan., Feb., and March, 8527. 3s.; dues, 347. 8s. 8d.; merchants' bills, 3407. 3s. 3d.; leaving balance in favour of adventurers, 1767. 19s. 5d. A dividend of 10s. per share was made. Capt. H. Trease and J. Bennett reported that they had 25 pitches working, by 64 men and 9 boys, at an average tribute of 15s. 8d. in 17.

At North Levant Mine meeting, on Wednesday, the accounts showed—Balance last audit, 697. 14s. 8d.; labour cost, 2097. 10s. 11d.; merchants' bills, 797. 0s. 10d.; 1/2 of stamps, &c., 131. 1s.; call received, 1201. 10s. 10d.—Balance last audit, 4097. 7s. 6d.; mine cost, Jan., Feb., and March, 8527. 3s.; dues, 347. 8s. 8d.; merchants' bills, 3407. 3s. 3d.; leaving balance in favour of adventurers, 1767. 19s. 5d. A dividend of 10s. per share was made. Capt. H. Trease and J. Bennett reported that they had 25 pitches working, by 64 men and 9 boys, at an average tribute of 15s. 8d. in 17.

At the Duke of Cornwall Mine meeting, on Tuesday (Mr. R. McCallan in the chair), the accounts showed a balance against the mine of 6847. 19s. 6d. The committee were re-elected. The Duchy have reduced the dues during pleasure to 1-60th. A call of 5s. per share was made. Capt. Wm. Roberts reported that the mine appeared a fair speculation, and likely to repay a liberal outlay.

At Swanpool Mine meeting, May 12 (Capt. Todd in the chair), the accounts showed a balance against the adventurers of 6167. 7s. 9d. A call of 11. per share was made. A resolution was also passed for enforcing payment of the arrears of call.

At East Wheal Russell Mining Company meeting, on Monday (Mr. Foster in the chair), the accounts showed a balance in favour of adventurers of 587. 13s. Resolutions were passed that the ore be sampled at the end of the current month, instead of waiting two months, and a vote of confidence in Capt. Goldworthy. The proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

At East Wheal Falmouth meeting, May 11, the accounts showed—Balance last audit, 417. 15s. 6d.; ore sold, 7557. 10s. 11d.; 1/2 of stamps, &c., 131. 1s.; call received, 1201. 10s. 10d.—Balance last audit, 4097. 7s. 6d.; mine cost, Jan., Feb., and March, 8527. 3s.; dues, 347. 8s. 8d.; merchants' bills, 3407. 3s. 3d.; leaving balance in favour of adventurers, 1767. 19s. 5d. A dividend of 10s. per share was made. Capt. H. Trease and J. Bennett reported that they had 25 pitches working, by 64 men and 9 boys, at an average tribute of 15s. 8d. in 17.

At the North Buller Mining Company meeting, on Monday (Mr. J. E. Mathew in the chair), the accounts showed a balance against adventurers of 61. 16s. 5d. A call of 7s. 6d. per share was made, and a resolution passed to forfeit all shares in arrears of call made Feb. 15, subject to restoration by the committee. The proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

At South Lady Bertha Mining Company meeting, on Monday (Mr. W. Watkins in the chair), the accounts showed a balance against adventurers of 91. A call of 15s. per share was made. Messrs. Watkins, J. Batters, Fuller, J. Robertson, Oliver, and C. Robertson, were appointed the committee of management, and the proceedings, which are detailed in another column, terminated with a vote of thanks to the Chairman.

At Ty-y-Worgold Slate Company meeting, on Wednesday (Captain Stride in the chair), Messrs. Monk, Cullum, John Phillips, Sims, and Captain Stride, were elected directors. A resolution was passed to forfeit shares in arrears of call not paid within two months. The proceedings, which are reported in another column, terminated with a vote of thanks to the Chairman.

At North Wheal Wrey Consols a considerable improvement has taken place in the bottom level; the lode is now 2 ft. wide, and producing good work. They are also daily expected to meet with the western lode in the cross-cut in the 20.

At Wheal Glynn (Bodmin), during the week, a great improvement has taken place; a fine lode has come into the shaft 7 fms. under the 24, worth at least 251. per fm., and with the best indications for further improvement.

The Alton Mining Association are in expectation of the arrival of a parcel of copper from the works, which is now on the way to its destination. The annual meeting of shareholders will be held in the first week of June.

In the Foreign Mine Share Market, during the week, a good business has been done in Marquette at 3/4 to 1; Worthing has sold at 3s. 6d.; General Mining Association of Nova Scotia in fair demand at 19; Coburn, 45 at 48; St. John d'Elroy, 13 at 15; Linares, 9/4 to 9/4; Bon Accord, 1/2 to 3/4 prem.; Santiago, 2 to 2 1/2; Australian Land, 3/4, and a good business doing. In other descriptions scarcely any transaction.

In American Securities, the market continues active. There has been, during the past week, a good business doing in most of the State, and in several of the chief City stocks. Railroad bonds are out of favour, and the transactions in them have been on a very limited scale.

From Leeds, our correspondents (Messrs. Gledhill and Co.) inform us that the unsettled state of the Continent, together with the expected change of the Ministry, has thrown a gloom on all share transactions. The mining interest has suffered to a great extent, still there is an evident improvement in the confidence of the public in this description of property, and we expect ere long to see them take the lead. Those intending to invest in this description of property had better take advantage of the present opportunity. Several of our Yorkshire mines have improved, and there is increasing confidence in the speedy realisation of dividends from many of the progressive mining companies. The Helvellyn Consols have cut in the new level only begun last month. Capt. May (May 15) reports—At the Consols, we have cut a very kindly working lode, and if it is not another vein it is a very strong feeder to the one that we are expecting to cut—the No. 2 lode; it looks well; I long to see it—that you may rely upon we do just now.

Our Sheffield correspondents (Messrs. Smith) report a dull market, and the only transaction has been the Eyan Mine at 46, which is 11. lower than previous sales. New Midland rather firmer, and buyers at 3/4 prem.

Our Hull correspondents (Messrs. Flint and Co.) report that business has been almost at a standstill in the share market during the week. Although money is abundant, it is not so generally speaking, in the hands of parties who are share buyers, but when the trade of the country improves we look for more activity.

GOLD IN OREGON.—In the House of Commons, last night, in answer to Mr. Christy, Lord Stanley said that within the last two months there had been no considerable quantity of gold discovered in the district lying between Fraser's and Thompson's Rivers, in British Oregon. Two years ago there were some discoveries of gold in Vancouver's Island; there had been no recent information concerning those discoveries.

Mr. Henry Edward Murrell has advertised for sale by auction, on June 8, sixteen 28th shares in the Vigra and Clogau Mine, under an order of the Court of Chancery made in a cause Goodman v. Robinson and others.

The *Gazette* statement of the movement of the precious metals for the week ending Wednesday last gives the following large totals:—Imports of gold, 1,345,652l.; exports of gold, 477,208l.; imports of silver, 79,620l.; exports of silver, 83557l.

The Return of the Bank of England for the week ending Wednesday, May 19, compared with the previous weekly return, shows the following results:—

Circulation issue	£1,664,700	Increase	£141,595
Circulation active	29,282,390	Decrease	96,325
Public deposits	4,735,910	Increase	1,886,741
Other deposits	13,972,553	Decrease	1,271,783
Government securities in banking department	10,626,363	Increase	1,000,000
Other securities in banking department	14,876,707	Decrease	534,328
Coin and bullion in both departments	17,926,980	Increase	129,273
Seven day and other bills	850,425	Decrease	37,417
The rest	3,210,632	Increase	5,441
Notes in reserve	11,351,770	Increase	237,299
Total reserve (notes and coin) in banking department	12,119,850	Increase	275,698

The movement under the heads of coin and bullion and reserve is satisfactory, but not of much importance. The principal alteration is in the securities and deposits. The Bank have taken the million of new Exchequer Bonds just created, and this operation explains the enormous increase in the Treasury balance. The decrease in the "other" securities is upwards of half a million.—*Daily News*.

At the Oriental Bank Corporation meeting, yesterday (Mr. H. G. Gordon in the chair), the accounts showed a net profit, on Dec. 31, 1857, after deducting current charges, and providing for all bad and doubtful debts, 156,222. 16s. 3d. The report stated that the assistance rendered to the London and Eastern Bank had not been so effectual in protecting the shareholders of that company as had been hoped and anticipated; litigation amongst themselves and some of their creditors having complicated and delayed the liquidation of their affairs. As regards the claim, however, which is fully secured, there is every prospect of its speedy settlement. The Chairman, in moving the adoption of the report, congratulated the meeting that after the troubles and anxieties of the past year, they were able to present such a satisfactory statement. The insurance account was most gratifying, and they hoped out of it to have a large amount to divide in addition to the ordinary profit of the bank. The report and accounts were unanimously adopted. A dividend of 11. 15s. per share, in addition to 11. 5s. already paid, was declared. A resolution was also passed that the remuneration to the directors be raised from 2400l. to 4000l. per annum. The retiring directors were re-elected, and a vote of thanks to the Chairman and directors terminated the proceedings.

In the extension which is taking place of the system of limited liability, a trial which occurred in the Court of Queen's Bench should receive particular notice. The secretary of the "Saltash Waterman's Company (Limited)," had accepted two bills on account of it, for an aggregate of 1051. The drawer of these had omitted the word "limited," and the secretary, in accepting them, failed to notice the neglect. The company having failed, an action was now brought against the secretary, on the ground that he was personally liable under the section of the Act of 1856, which declares that such liability shall arise if any officer of a limited company shall "sign, or authorise to be signed on behalf of such company, any bill of exchange, promissory note, endorsement, cheque, or order for money or goods, &c., in which the title of the company is used with out the word "limited," being introduced. The case was so clear, that Lord Campbell at once directed a verdict to be found against the secretary for the full sum.

RAILWAY TRAFFIC.—The Traffic Returns of Railways in the United Kingdom for the week ending May 15 amounted to 438,790l., and for the corresponding week of 1857 to 452,230l., showing a decrease of 13,440l. The gross receipts of the eight railways having their termini in the metropolis amounted for the week ending as above to 177,517l., and for corresponding week of 1857 to 183,497l., showing a decrease of 5980l. The decrease on the London and North-Western Railway amounted to 5246l.; on the London and Blackwall to 119l.; on the London, Brighton, and South Coast to 101l.; on the London and South-Western to 966l.; and on the South-Eastern to 436l., total, 6885l. But from this must be deducted 1071. the increase on the Eastern Counties, 436l. on the Great Northern, and 362l. on the Great Western, together, 9057l.; leaving the decrease, as above, 5980l.

The receipts on the other lines in the United Kingdom amounted to 261,273l., and for the corresponding week of last year to 268,733l., showing a decrease of 7460l. In the receipts of those lines, which, added to the decrease on the metropolitan lines, makes the total decrease 13,440l., as compared with the corresponding week of 1857.

THE IRON TRADE.—Although there is not much advance, the trade is looking up, and the demand has increased during the past few weeks. Messrs. Samuelson's furnaces, at Branchend, are to be put in operation again on June 1, and we understand, two of Mr. Cochrane's are to be re-lighted about the same time. The following are, we believe, about the present current prices of the Durham and Cleveland iron, free on board, at Middleborough:—No. 1, 56s.; No. 2, 54s. 6d.; No. 3, 53s. 6d.; and No. 4, 52s. Messrs. Snowdon and Hopkins's furnaces, are nearly completed and will be opened shortly. A correspondent says—"The pig-iron trade of Cleveland remains much in the same position as it has done since the commencement of the year. The demand continues very slack, and prices show very little symptoms of improvement. The unsettled state of political matters, no doubt, tends to prejudice business. Should the present Government find themselves supported by the House, when Mr. Cardwell's motion of the vote of censure comes to a division, it will tend much to the advantage of the general trade of the country, and diffuse confidence among the mercantile community."—*Stockton and Hartlepool Mercury*, May 22.

THE NAUTICAL DIVING BELL.—We learn from the French papers, from which we, in another portion of our Journal, give some short extracts, that this important improvement in submarine operations has been submitted to the scientific men of France, and that they warmly approve of its usefulness and simplicity. Mr. Hallett (the banker of New York) who has had the honour of introducing the "Nauticus" to the consideration of this country and France, must, we think, be satisfied with the high commendations which have, in both countries, been given to the energy and ability which he has evinced in the formation of this important submarine invention.

MINE ACCIDENT.—A "run of ground" took place last week in Bales-widen Mine, and placed in great danger the lives of a man and a boy. Suspicion was first excited by the discovery that their above-ground clothes remained in their place long after the time for coming up to change had gone by. On going down into the mine it was soon found, and before any steps could be taken for the missing ones, in consequence of the great change in the appearance of the ground, but at length a man called Martin Wallish succeeded in making himself heard by them, and by spilling through the shaft about 6 ft., an entrance into their dark dungeon was effected. The man, James Edwards, and the boy, Henry Edwards, stated that they bored a hole about ten o'clock the previous day, when the ground gave way; they continued calling as well as they were able, but at length became so much exhausted that they gave up everything as lost. They were got out about one o'clock on Friday, having been shut up 27 hours in their dreary dungeon. The greatest relief is due to Messrs. Clements and Trehear, the agents, and to Peter Harvey and Philip Edwards, the timbermen, for the exertions they used to get the sufferers out.—*West Briton*.

REFUSAL TO ALLOW INSPECTION OF A MINE.—On May 8, Mr. Lenderyou and Mr. Charles Hawke, of Truro, who are adventurers in East Wheal Falmouth, sent Capt. Burrows to inspect that mine, giving him a written authority for doing so, which he presented to the managing agent, Capt. Hawke. The latter refused to allow the inspection, and in consequence Mr. Lenderyou and Hawke made an application on Tuesday last to the Vice-Chancellor of the Stannaries Court, who immediately granted an order for the inspection.—*West Briton*.

Copper ores for sale at Swansea, May 25.—Cobre 89, 61, 87, 79, 72, 45, 42, 15—Cuba 72, 71, 70, 68, 67, 64, 49—Knocknahan 75, 74, 69, 61, 63, 62—Berehaven 122, 115, 109, 70—Spanish 85, 15, 4, 5, 1—Spanish 47, 22, 5, 4—Irish Ore 36, 16—Holford 24, 13—Namaua 29—Total, 2115 tons.

TO ENGINEERS.—WANTED, A SITUATION AS MANAGER, OR GENERAL FOREMAN. Has been some years engaged in the above capacity, and possesses a thorough practical knowledge of the engineering and millwright business, railway machinery, plant, &c. Has been accustomed to make estimates, specifications, working and other drawings, &c. Testimonials and references as to ability.—Address, stating terms and requirements, to "J. B.," care of James Scott and Son, Cross-street Chambers, Manchester.

WANTED, A FOREMAN, TO MANAGE TWO SMALL BLAST FURNACES, and make himself generally useful. He must thoroughly understand his business, and be able to take the time of the men. Satisfactory references required. Wages £2 per week.—Apply, in writing, to "X. Y. Z.," Post-office, Northampton.

WANTED, AN ENGAGEMENT AS FURNACE MANAGER. Testimonials and reference can be had, if required, having had 10 years' experience in one of the largest ironworks in South Wales.—Address, "M. K.," *Mining Journal* office, 26, Fleet-street, London.

WANTED, A PARTNER IN A BLAST FURNACE, recently erected in the West of England, and commanding unusual advantages from the proximity of iron ore and coal, which are being obtained at very low rates.—Further particulars, as to capital, &c., may be obtained on application, by letter, to "X. Y. Z.," care of W. E. Chessell, Esq., 5, Queen-square, Bristol.

TO CAPITALISTS.—A GENTLEMAN, who has extensive and practically acquainted with the manufacture of iron and steel in all its branches, is anxious to OBTAIN A PARTNER, who has sufficient capital to put down other machinery for the purpose of manufacturing steel and other iron suitable for the Sheffield trade.—Apply to Mr. WM. UNWIN, solicitor, Queen-street, Sheffield.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS. NEAR STOKE-UPON-TRENT, STAFFORDSHIRE. JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER. Reference.—Professor Miller, King's College, London.

Just published, demy 8vo., with Twenty Illustrations on Copper, price £1 5s., an ELEMENTARY TREATISE ON IRON METALLURGY, UP TO THE MANUFACTURE OF PUDDLED BARS. Built upon the Atomic System of Philosophy, the Elements are explained upon being Estimated according to Dr. Wollaston's Hydrogen Scale of Equivalents. Comprising Suggestions relative to Important Improvements in the Manufacture of Iron and Steel, and the Conduct of extensive Ironworks. WITH ANALYTICAL TABLES OF IRON-MAKING MATERIALS. BY SAMUEL BALDWIN ROGERS, of Nant-y-glo, Monmouthshire. "I do not hesitate to say Mr. Rogers's work is the most complete combination of sound science and practical practice that has yet appeared on Iron—beyond comparison."—*DAVID MOULIST*. London: *Mining Journal* office, 26, Fleet-street.

Our Australian colonies and the mining interests of this country are now so closely allied, that the result of mining enterprise in those possessions produces an influence at home quite apart from the mere interest which attaches to the successful development of new localities for the production of the ordinary metals, as well as of gold. In no respect is this more conspicuous than in mining labour. In fact, the effect of emigration of miners is naturally felt in our mining districts, and the moment they reach their destination they find ready and remunerative occupation in the different branches to which they are accustomed. Much has been said and written as to the glut of labour in Australia; but this applies solely to Victoria, and even in that colony it refers almost exclusively to what may be termed effeminate labour—that is, those classes of persons who are more accustomed to office, or in-door employment, but does not in any sense include those who occupy themselves in the search for, or in the working of, mines. In Victoria and New South Wales there is, it is true, little more produced than the precious metal, but from South Australia we draw large supplies of rich copper, lead, and tin. In the two last-named colonies, where mining in its more ordinary sense is extensively prosecuted, there is a dearth, and not a glut, of mining labour, indeed, of every description of labour; and various localities well known to contain rich lodes of ores would be promptly opened up if the supply of this description of labour were equal to the demand. We may add, from the letters which reach us from the various mining districts in this country, it is evident there is a steady increase of mining labour leaving our shores. In fact, this is the natural consequence induced by the continual arrivals of large amounts of the precious metal from Victoria and Sydney, and of rich copper and silver lead ore from South Australia—the result in a great measure of unskilled mining with unskilled labour; therefore, it becomes self-evident to experienced miners that they are certain to obtain immediate and lucrative employment the moment they reach the mining localities of Australia. No discrimination is shown when allusion is made to colonial labour by the general press in this country, which necessarily leads to misapprehension in the minds of some who otherwise would emigrate; for while there is a glut of one description, there is frequently a great dearth of another. Our Australian colonies are an illimitable field of mining enterprise, and with practical miners to open up the various deposits of ores, and with a corresponding necessary amount of agricultural and pastoral labour to supply the wants of others, it is evident that no glut of mining labour can exist for years to come.

MINING PRODUCE.—The *Red Jacket*, the *Sefton*, the *Thames*, and several other overland vessels, have arrived during the week from Port Phillip, with various amounts of the precious metal, as well as of copper and silver-lead ore; the gold being the production of the colony of Victoria, and the copper and lead ore of the adjoining territory of South Australia. A very large amount of gold is still overdue, and may be daily expected.

LEAD ORES.			
Mines.	Tons.	Price per ton.	Purchasers.
Sold on the 17th May.			
Fordale	100	£15 17 3	Mining Co. of Ireland.
Frongoch	50	14 1 0	Panther Company.
ditto	50	14 2 6	ditto
East Daren	55	16 11 6	Walker, Parker, & Co.
ditto	30	16 9 0	ditto
Cwm Erddin	42	16 18 6	ditto
Sold on the 19th May.			
Wheal Mary Ann	91	26 17 0	Sims, Williams, & Co.

BLACK TIN.			
Mines.	Tons c. q. lb.	Price per ton.	Purchasers.
Sold on the 12th May.			
Wm. Kitty (St. Ag.)	13 1 12	£82 7 6	£ 816 13 4
ditto	1 18 2 13	38 0 0	73 7 4
Sold on the 20th May.			
Drake Walls	9 0 0 0	69 12 6	626 12
ditto	11 0 0 0	62 12 6	6—Williams & Co. 6—Daubuz & Co.

COPPER ORES.

Sampled May 5, and sold at the Royal Hotel, Truro, May 20.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols	126	£3 11 6	Collacombe	27	£3 10 0
ditto	122	3 6	ditto	23	6 12 6
ditto	118	7 15 6	ditto	21	1 1 0
ditto	115	4 12 6	Devon and Cornwall	90	4 3 6
ditto	114	7 17 6	ditto	80	3 3 0
ditto	111	3 4 6	ditto	42	14 17 6
ditto	101	3 19 6	ditto	13	1 6 6
ditto	100	1 7 6	Bedford United	114	3 5 6
ditto	98	5 1 6	ditto	100	6 16 6
ditto	97	4 14 0	Hingston Down	54	4 10 0
ditto	96	7 14 0	ditto	53	2 14 0
ditto	95	3 18 0	ditto	47	10 10 6
ditto	94	1 1 6	Wheal Edward	51	2 12 0
ditto	91	3 4 0	ditto	46	4 3 6
ditto	83	6 2 6	ditto	42	5 18 6
ditto	71	7 11 6	ditto	36	3 15 0
ditto	63	3 3 6	ditto	6	12 2 6
ditto	62	8 17 6	Wheal Friendship	49	8 5 0
ditto	55	8 12 6	ditto	49	4 12 6
ditto	54	3 9 0	ditto	43	16 2 6
ditto	48	3 12 0	Kelly Bray	66	3 4 6
ditto	47	3 10 6	ditto	35	5 4 0
ditto	46	2 10 0	ditto	27	4 0 6
ditto	45	3 19 0	Calstock Consols	96	4 15 6
ditto	40	8 11 6	ditto	27	12 12 0
Phoenix Mines	88	3 19 6	East Wheal Russell	59	11 17 0
ditto	83	4 5 6	ditto	47	4 18 6
ditto	80	4 3 0	Wheal Franco	45	4 18 6
ditto	78	4 13 0	ditto	45	4 18 6
ditto	72	3 11 6	Wheal Emma	46	5 6 6
ditto	61	8 8 6	ditto	41	5 2 6
West Caradon	75	7 6 6	Lady Bertha	81	3 1 0
ditto	63	6 9 6	Gawton Copper Mine	68	1 14 6
ditto	59	7 9 0	ditto	3	10 16 6
ditto	56	9 11 0	Wheal Russell	54	3
ditto	55	4 2 6	Devon and Courtney	25	5 7 0
ditto	52	4 2 0	Devon Buller	25	3 19 6
Collacombe	61	4 2 0	Wheal Zion	22	3 1 0
ditto	55	5 16 6			
ditto	39	6 5 6			

THE PROGRESS OF MINING IN 1857, BEING THE FOURTEENTH ANNUAL REVIEW.

By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Glencans among Mines and Minerals*, &c.

The FOURTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in a SUPPLEMENTARY SHEET to the MINING JOURNAL of Jan. 2, 1858.

A FEW COPIES OF THE REVIEW OF 1855, containing Statistics of the Metal Trade, Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES OF THE REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining Offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or 2s. 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON, F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Looking at the causes for the present depression in mining shares, Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines to pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 31st March, 1858, with Particulars of the principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Three Years, &c., with PLANS of UNDERGROUND WORKINGS, is now READY, price One Shilling, at No. 117, Bishopsgate-street Within, London.

Reliable information and advice will at any time be given on application. Also, COPIES OF "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

CORNISH COPPER MINING ENTERPRISE, 1850 TO 1st MAY, 1858, INCLUSIVE. By R. TREDINICK, Mining Engineer and Share Dealer, 4, Austinfriars, London. 1000 copies only are published, price bound 5s. per copy. Early application, to guard against disappointment, is earnestly requested. Communications to be addressed to the Editor of the *Mining Journal*, 26, Fleet-street, London.

MAPS OF MINES.—Preparing for publication, and will be ready this summer, the following Maps of Mining Districts.

TAVISTOCK, CALLINGTON, and LISKEARD (in One Map). This will supersede the map I published in 1850, at 12 chains to an inch, of the Tavistock district.

ST. AUUSTELL DISTRICT, from Lostwithiel to Teague's Gate, at 12 chains to an inch.

WEST CORNWALL DISTRICT, Second Edition, enlarged, so as to embrace all the mines between that town and Penzance, and St. Ives and Helston.

Each map will show all known lodes, cross-roads, boundaries of tithes, &c.; and the whole will furnish all the geological and geographical information required in relation to the Cornish and West Devon Mines (except St. Just).

The following Maps now on sale.

CAMBORNE and ILLIGAN DISTRICTS, containing the mines between Redruth and Crowan.

LELAN DISTRICT, and ST. JUST DISTRICT.

Each of the above maps at 2s. 1s.; mounted on rollers, 5s. extra.

Orders for all or any of the maps may be given at the *Mining Journal* office, 26, Fleet-street, London; to Mr. PETER WATSON, 58, Threadneedle-street; or to Mr. R. STYMONS (the author), 11, Parade, Truro.

PATENTS, SEVERAL THOUSAND: A CLASSIFIED CATALOGUE OF SUBJECTS; with "ADVICE TO INVENTORS ON PATENTS, CAPITAL, AND CONTRACTS."

Post free. H. DIRCKS, C.E., Patent Agency Office (Established 20 years), 32, Moorgate-street, City.

Notices to Correspondents.

Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *re-ordered*: it then forms an accumulating useful work of reference.

WESTERN AFRICA MALACHITE COMPANY.—We have made enquiry about the tenure of this company's property in Africa, and find that a concession direct from the Portuguese Government has been preferred by the shareholders, and that, upon formal application, a promise of one has been obtained, and is now in course of preparation. This concession will be in perpetuity, in conformity with the mining laws of Portugal. With respect to the disposal of the further surplus of 200 of the vendor's shares, it is in accordance with the wish of the parties who have joined in the enterprise, that so large an interest as 600 shares should not remain in the vendor's hands, but that at least 200 should be distributed amongst an increased number of holders. This distribution has already commenced, and Messrs. John Taylor and Sons are empowered to nominate holders to the extent of the 200 shares. Every information about the concern will be given on application at the offices of the company, in Queen-street-place. In the correspondence received by the *Cleveland* steamer last week appears the following interesting passage from the Governor of the province, who is also at the head of the company's works, and which is very valuable, as showing that the company intend to stand by the prospectus issued on its formation:—"I fully agree with the other part of your letter, and I should say, with respect to not employing slaves in the works, that I consider this not only in conformity with the dictates of humanity, and the positive orders of my Government, but it is even commendable in this country with the principles of economy, for there are plenty of free men here who will work for 100 beads per day, equal to 60 reals hard money, or 2d., and this for working days, without any other expense with them, which is not the case with the slaves, who have to be fed, taken care of when sick, and clothed at the expense of their masters, thus becoming more expensive than free men."

PEAT AND ITS PRODUCTS.—In the specification of M. Chiland's invention, lately filed by Mr. Henry, of the Patent Agency, 54, Fleet-street (referred to in last week's Journal), it is stated that peat gas may be usefully employed for lighting purposes, by constructing burners in such manner as to restrict the supply of air to the flame, so as to keep the carbon in suspension, which forming highly heated particles, the intrinsic illuminative properties of the gas are advantageously developed. The specification further describes a new manufacture of fuel, produced by immersing peat coke in thick distilled peat tar, and subsequently carbonizing it in a peculiar retort. The inventor also specifies an apparatus for distilling peat tar, in which high-pressure steam is used as a heating agent. In the course of some of the operations gases and oils are obtained, which may be turned to advantageous account.

RATING OF MINES.—The session is now half over, and the committee for watching the interests of the miner may congratulate themselves on the fact that they have obtained another respite, as it is too late now for Mr. Nicholas Kendall to bring forward any bill. As it is not improbable that a dissolution will take place, I would recommend all those concerned in mining in the county to remember those gentlemen who wish to rate mines. Mr. Sawle lost his seat at Bodmin through his advocacy of rating. We know not how soon this contingency may occur; let the electors be up and doing, and not allow a few of the landowners to oppress and blight the most important branch of industry in the country. *Capele, Redruth.*

HOLMSTON MINE.—On enquiring at the office in London I find that no account has been received of the extraordinary mishap at this mine, reported in your valuable Journal last week. Whatever may be the intention of the parties supplying you with such statements, the well-known respectability of the directors, and the high character of the captain, must be a sufficient guarantee that if there were any truth in the information it would not be kept from an old shareholder. *City, May 20.*

ROSSIE AND CANADA LEAD MINING COMPANY.—The directors of this company I have no doubt are actuated by the best intentions; a certain place we have been told is paved with them. Two of the gentlemen on the board have great experience in mining. I allude to the honorable Member for Finsbury, now so well known at St. Stephens for his historical knowledge, and his colleague Mr. Jas. Crosby, in addition to his experience as a Director of the Linnet Mining Company. This latter gentleman was formerly on the board of the Dalradian, which mine was purchased from the Swedes, abandoned by the English as worthless, and is now being profitably worked by the Swedes, so that it is not likely he will err on the side of an improvident risk. The mines have already been worked by Americans; and giving our directors all due credit for caution, I should wish to enquire how it is that Brother Jonathan should have been so generous as to afford us such great advantages, when he might have retained them all himself? *QUEEN.*

CHANCELLORSVILLE FREEHOLD.—As this company, despite the numerous applications made to them, appear to give no explanations, we may reasonably infer that Mr. Josiah Harris's magnets have not rotated so efficiently as was desired. Might I suggest, if the works at Frosham are not in the hands of the sheriff of Cheshire, that the directors would kindly allow Mr. Squires, with the gold mining shareholders who have confidence in his operations, to make a trial of the celebrated works, so much vaunted in the columns of the *Times*. *Skeptic.*

MINING TOURISTS.—Should any of your numerous readers be making a geological tour for collecting specimens, or studying *in situ*, I advise them to visit a small mine called Tredrarr, in the parish of Warminster, about one mile off the high road from Launceston to Camelford, near the Halworthy Inn, where they may procure, on the burrows, some extremely rare and beautiful examples of contorted slates, many of them of extraordinary character. Broken as they are by chance, they partake of better form than the most careful specimen-hunter could possibly achieve with his hammer, whilst the profusion enables him to select as to size and quality. These are found on the lower burrow of the adit; here also may be found exquisite examples of that difficultly explained subject—slate cleavage; the sedimentary or depositional laminae are distinctly shown by variously coloured strata, whilst the place of crystalline cleavage is easily ascertained by splitting the stone; it will be found the rhomboidal form prevails. Large quantities may be had for the trouble of visiting the spot, where also capital bone stones for razors are in abundance, as well as slates admirably adapted to the manufacture of school pencils; these are found in the higher burrows. In some of the stones, on minute inspection, fossils may be discovered, but they are scarce. This adit has been driven to unwater a large north and south iron lode, which may be plainly seen in a pit sunk a few feet from the surface. In an adjoining field the student may have an opportunity of seeing a deposit of manganese ore of fine quality for its depth; and in a few feet he may procure the black oxide and steel-like ore, of fair quality as specimens. The place is well worthy a visit for these purposes, which are interesting and eminently instructive, particularly the cleavage and contortion of slates. I have procured specimens which would not disgrace the collection of De la Beche, or our national Museum; therefore, I recommend the spot to students, as they may procure, without trouble, better examples than a whole day's picking could furnish them. I visited the spot with an accomplished miner and geologist, who expressed his high gratification, and, of course, furnished his collection with the best specimens he could find. Plenty are left for those who visit the place, although they have been well searched by your old friend—G. H.

STEEL MANUFACTURE.—I presume we shall this week have Mr. Sanderson's reply to "Eisenstein," as his remarks certainly put rather a thick covering over the merits of Mr. Sanderson's process, and appear to have some truth in them. It has, however, not been sufficiently explained whether there are any real defects in the inventions of Bessemer, Martell, Mushet, and Binks which will prevent their success, or whether it is merely sound practical knowledge that is wanting. I am at a loss to ascertain where the novelty in Mr. Sanderson's process is, and think he should give a more detailed description than has been appeared, and explain in what way the cyanide of potassium is superior to Binks's cyanogen compounds. If one process answers well I do not see why the other should not. As to Mushet's steel (I allude, of course, to the samples at your office), there can be no question as to its excellence; it only remains for Mr. Mushet to prove that it is the result of his process. Mr. Sanderson seemed to infer, at the Society of Arts, that there was doubt upon that point, and with truth I do not know. If the steel at your office is produced as described by Mushet he must succeed, for his steel is as far superior to Mr. Sanderson's metal as that gentleman's metal is to the commonest pig-iron; at least, that is my opinion.—B. C.

MANUFACTURE OF IRON.—The question as to whether the process patented by Captain Uchatius will enable steel to be produced as promised, ought, I should think, now to be finally settled, as I learn Mr. Lenz is again in England. As he has been charged by Mr. Mushet with fostering a rail upon the public as the result of Capt. Uchatius's patent, which was manufactured by Mr. Mushet by another process, Mr. Lenz cannot remain silent, unless he desire to be branded as an impostor. He should state what has been done at Ebbw Vale Company, and also whether steel has been successfully produced by the process in Austria and France: I have not heard that it has. It should also be stated whether ordinary British coke iron has been used in the English experiments, or charcoal iron only, as it would be of little advantage if charcoal iron alone can be used. Mr. Lenz proposes to sell steel at 8s. per ton, and as you quote India charcoal pig at 7s. 10s., there would be a small amount left for paying the expenses of converting it. I should also look for Mr. Lenz's statement in your next, and no doubt many of your readers will do the same.—M. R.

GREAT WHEAL RUBY.—The letter of Captain Pascoe, though in type, is withdrawn. Several of the statements being found, on enquiry, to be incorrect, while its general tenor is objectionable.

NEW POLGOOTH and WOODCROFT.—Some six years since this concern was started, under the auspices of the late Mr. George Thomas, of Great Polgooth notoriety, when I was induced to apply for a few shares, on which I paid the deposit. Shortly afterwards a call was made, and finding they were valueless in the market, I preferred forfeiting them to handing out more cash, and there the matter rested. Judge, then, of my surprise at now receiving a communication, making a demand upon me for expenses of winding-up, &c., with the threat of legal proceedings, if not immediately complied with. I wish, therefore, to know whether it is possible to make me liable in this regard; as I am determined to resist it as unjust.—W. E. RICHARDS: *Islington.*

GOLD EXTRACTION.—I learn that a process is to be tried at Alotepoque by the Central American Mining Company, for extracting gold from the ore by the use of iron pyrites as a flux. Can any of your correspondents inform me wherein the system to be adopted differs from the well-known Mansfeld process?—H. G.

THE HARWICH and ANTWERP STEAM NAVIGATION COMPANY.—In a pamphlet by Mr. S. B. Rogers, of Nant-y-Glo, published at your office 14 years since, I find the first mention of establishing a regular passenger communication between Harwich and Antwerp, which would undoubtedly offer great facilities for communication with the Continent. The nearest route established is that from Harwich to Rotterdam, and this is in the hands of private individuals, who managed to establish a lucrative trade at the expense of the London, Harwich, and Continental Steam Packet Company (Limited). Why could not a company now be formed for running vessels from Harwich to Antwerp? It would materially add to the profits of the Eastern Counties shareholders, and, therefore, probably receive their support.—J. H.

"T. C. S." (Baker-street).—In the blast furnace when a quantity of anthracite is used it is subject to decrepitation to such an extent that it chokes the furnace and suspends all operations. The only resource the smelter then has is to put on a fierce blast and absolutely blow it out. Some anthracites contain as much as 95 per cent. of carbon.

ADELAIDE LAND and GOLD COMPANY.—The liquidators endorse to the fullest extent the observations of "N." in your last Journal. They have, ever since their appointment, seen, and continue to see, the propriety of rendering an account of their stewardship, and have done so, by giving the shareholders inspection of every voucher, document, and despatch, as the same is sent to, or arrives from, the colony; thus imparting to the shareholders the same amount of knowledge the liquidators themselves possess. What the liquidators have not done, and what they decline doing (having a regard to the interest of the shareholders) is to give to parties not shareholders, and not interested in the company, information by means of which such parties, and not the shareholders, would benefit from any contingency that might arise.—HARCOCK and SHARP.

WEST PHOENIX MINE.—Mr. G. W. England, and other shareholders, are anxious that the affairs of this company should be finally settled. The indisposition of the auctioneer, he considers, should not cause delay. He also complains that his letters of enquiry are not now even replied to.

GOVERNMENT INSPECTION OF MINES.—Had there been officials here, as in Germany and other countries, where there is a recognised mining code, the inhabitants of Hanley would not have had their town undermined. The bergmeisters in Hanover, Saxony, and Prussia, are authorised to interfere in the management of mines only to this extent:—to the safety of the workers, and the superintendence of the surface. Many of the houses in Hanley are built on pits which have been abandoned, and filled up with loose marls; that these should sink and crack is, I believe, a matter of surprise to no one. I have been surprised that previously there has been no notice taken of this; I can only attribute it to the circumstance that those who are on the surface at Hanley are equally as reckless as their neighbours underground.—A. LATE VISITOR.

TREVELYAN MINES.—If "A Shareholder" be what he professes, he can obtain the information he requires on application at the offices of the company, 15, George-yard, Lombard-street.

WHEAL GEBREK.—The period when the meeting of this mine should be held has now elapsed for some period. We were told when last we met that several of the defaulting shareholders had been put in the Stannaries Court. I was of opinion that the jurisdiction there was of the most summary nature; but, judging from the long period that has elapsed since the subject was first mooted, I am led to believe that the processes there are equally as tedious as those in the superior courts. The mine has not had their day; if called upon to pay up, and that punctually, Gaskus would still be a promising property.—CONTRIBUTOR.

WHEAL ZION.—In your last you have a paragraph to the effect that Wheal Zion is abandoned to be a waste of land. This is a mistake; the only change is, that all unprofitable work in the old mine is stopped, and the adit driven to explore the Giebladen, where it is expected a mine will be found.—A SHAREHOLDER.

LEVANT MINERAL COMPANY.—Notwithstanding the various correspondence that has taken place with regard to this company in the columns of the *Mining Journal*, hitherto the directors have not thought proper to publish any account of the last year's transactions. When the prospectus was first issued they stated that the mineral resources of the Turkish empire were about to be developed under their auspices; and according to all accounts that have come to hand they have merely confined their operations to the raising of money, and that in an inconsiderable quantity, in the island of Naxos, the mines there having previously been worked by the Greeks. I would not assume that they have displayed any bad faith to those of the public who have embarked their money in the undertaking, but this I do aver, that their performances have fallen very short of their promises, and this demands some explanation.—DEMETERIS.

CARDIFF PRESERVED COAL COMPANY.—I see by your last Journal that this company is progressing satisfactorily; but I hope those who think of becoming shareholders will ascertain whether the patent has been received, or is to receive, either in shares or money, or both, any consideration for his patent before the shareholders receive 10 per cent. dividends. An advertisement states that the patentee will receive nothing for his time and skill before the shareholders get 10 per cent., but it does not say how much he will obtain for the use or purchase of his patent, or for any other benefit conferred by him, and my two former letters to you upon this subject have had no reply.—CARBON.

MINING IN NORTH AMERICA.—Can any of your correspondents who are shareholders in any of the following mines inform me what dividends they have paid or are likely to pay to their fortunate proprietors?—Liberty, London and Virginia, L'Alge D'Or, Waller, Mount Carbon, &c. I should like to know the answers to ask this question, as I perceive a prospectus has been issued to work mines somewhere in Canada, which formerly belonged to an American proprietary, as all of these have done.—IGNORAMUS.

"Error is Error Still."—The letter from Tavistock could only appear with the writer's name attached.

MINING CONGRESS.—I agree with your suggestions, that if such a meeting as is now held in Vienna were convened somewhere in England it would be productive of great good. It is to be regretted that we have no regular mining code, some districts being governed according to local regulations, while others are subject to the common law of the land. To persons unacquainted with their different rules the subject becomes one of great difficulty; and I am convinced that more persons would embark their capital in mining adventure if they were cognisant of the several and varying rules which exist. A meeting such as this would excite discussion, and tend to diffuse a great deal of useful information; but I fear, whilst the present jealous feeling exists among our mining agents, that any attempt at an amalgamation or interchange of knowledge will be futile. When education is more diffused, and unhappy and jealous prejudices rooted out, we may then have some hopes that our miners will assume that position among those of foreign countries which hitherto their own dogged obstinacy has prevented them from attaining.—ALPHA.

MR. GEORGE HENWOOD, having visited most of the mines in the Callington and Launceston districts, will be at Lostwithiel and Liskeard during the next week. Persons desirous of availing themselves of Mr. Henwood's assistance, regarding the prospects or status of mining properties of these localities, may obtain every information or reports by addressing a letter to him, at the post-office of these towns, when attention will be paid to all such communications. Mr. Henwood was underground at Wheal Bray on Thursday last; his report of the mine appears in another column.

ANGLO-CALIFORNIA GOLD MINING COMPANY.—Your correspondent, "Lex," is quite correct in his estimate of the liquidators of this ill-fated association: neither to shareholders or creditors do they condescend to afford any information. I have heard it said that the late superintendent would render no account; this, however, is certain, that the liquidators, who have been in office several months, have as yet issued no statement. Surely there must be some law to compel them to do this, and it is surprising to me that Mr. Coombe, with the influential body of shareholders he represents, has not had recourse to the Court of Chancery. I am convinced of this, that if any were energetic enough to move, they would be supported by the general body of shareholders, who are tired of procrastination, and the continuous delays which have obstructed the progress of the company from its first formation until the present time. If Mr. Luke Williams had always been at the helm the property would long since have been finally wound-up. Instead of having to subscribe an extra shilling per share, to be frittered away in hotel expenses and race horses in California, we should probably have had some portion of the capital returned to us. I do not, however, see how, although we had the best location in California, our affairs could have prospered, seeing that our sapient directors appointed in the first place to carry on mining operations a naval knight commander, who fancied he had at Woolwich dockyard an arsenal at his command to repair all machinery; and when, after he had hopelessly mortgaged the property, the gentleman appointed to supersede him was a mate in the merchant service, as if a knowledge of ploughing the waves was a recommendation for delving in the bowels of the earth. It is useless now, however, to recur to by-gones—our business is with the present, and this is to compel the liquidators to give some statement as to the position of the company. It appears we are all but insolvent, yet we have a staff and chambers in Gresham House—*verbum sat*.—PRAXINUS: *Pool.*

SUBSCRIBERS IN AMERICA.—Our friends in America are informed that they can obtain the *Mining Journal* by ordering it from a bookseller in any of the principal towns in the United States. Mr. Triibner, of Paternoster-row, is the London agent, and sends parcels by every mail to the principal booksellers and news agents there.

GOLD EXTRACTION.—If there is a company being formed for such an object as stated in the Journal—to extract gold from quartz too poor to pay the cost of the ordinary process—the shareholders will deserve to lose their money. Had the public been aware of what is doing in regular gold establishments abroad, such absurd schemes would not be noticed. I beg leave to furnish the following results for the month of March, of one of the gold establishments of which I am the consulting engineer:—1250 tons of quartz and slate, of the average value of 5 dwts. of fine gold per ton, stamped and dressed on the established system, produced about 3½ dwts. of fine gold per ton. Total cost, £2756. Produce, £4350; profit, \$1694. Let those who waste their time in gold extracting schemes, and who have not been able to make quartz pay which they alleged contained upwards of 1 oz. of gold per ton, reflect on the above results. It is high time to put a stop to such absurd and deceptive speculations as those alluded to by some of your correspondents.—EVAN HOPKINS.

VICTORIA IRON and CEMENT WORKS (Whitby).—I am much obliged to Mr. Harrison for his explanation; it fully confirms the opinion I formed as to the cause of the late catastrophe. The total thickness of the ironstone seams referred to in my letter was taken from Messrs. Palmer and Co.'s section. I was aware some of the beds, especially the dogger band, got thinner to the south, but I had no opportunity to measure them. I hope the company will in future be well advised, and confine the operations to the paying business—mining in the best iron seams, and ship the raw product. The upper seams are good, and may be easily wrought.—EVAN HOPKINS.

DEN MOUNTAIN.—No report has yet been received, and the price of the shares is much depressed, but without any good reason, as the chromate of iron, which abounds in the property (freehold and of great extent), is sufficient to pay a good dividend alone, without any other working.

ROSSIE AND CANADA LEAD COMPANY (Limited).—In reply to the notice signed "C." in the Journal of last week, I may state that the prospectus of 1856 was never circulated, or in any way acted upon. A few were printed for the gentlemen forming the provisional directors at that time. By subsequent arrangements, a totally new board of directors was constituted, and the present company commenced operations in July, 1856, without coming before the Bedford Mines, in Canada, for the best of good reasons—upon inspection it was found they were not worth having. The prospectus of 1856, printed by the provisional directors, being considered in several particulars overdrawn, and with a tendency to mislead the public, the present directors would not adopt any of its provisions. In the issue of their own prospectus they have been satisfied with a simple statement of facts.—B.

MODENA MINING COMPANY.—"W. B." (Athenaeum).—It is three or four years since that an English company was formed for the purpose of raising iron and copper ores in the Duchy of Modena; it is not now in operation, and, we believe, never was. The laws to which the property was subject prevented an English company working the mines, the undertaking was consequently abandoned.

Received—"C. N." (Gloucester); "J. W." (Tavistock); "G. W." (Warrington).

* * * The MINING JOURNAL can be procured at our office by Eleven o'clock on Saturday morning. Newsmen, therefore, can make the necessary arrangements to have the Journal at the several stations in time to forward by the mid-day trains, enabling many of our subscribers to receive their copies on the day of publication.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MAY 22, 1858.

The address of the President of the South Wales Institute of Engineers, on the occasion of their recent inaugural meeting at Merthyr Tydvil, furnishes a better indication of the present condition and probable development of the iron industry of this country than might have been expected from the necessary limitation of such a discourse. It is also very important, and well deserving of attentive consideration, from the fact that the chief deficiencies of the smelting and working of iron are clearly and intelligently brought forward, as well as the particular direction of improvement that requires to be cultivated, and from which valuable results may with most reason be anticipated. It is satisfactory to find that among these sources of improvement in the several operations connected with the metallurgy of iron the application of chemistry is recognised as being calculated to render essential service to the ironmaster, and that the opinion was expressed that there had been too great a habit of sneering at the chemist and his theories. The recognition of the value of chemistry in reference to an art which, like metallurgy, consists almost essentially in the production of chemical changes, is certainly not by any means remarkable, and might have been expected, sooner or later, from such a class of men as those concerned in the management of English ironworks. On the contrary, it might be wondered at that steps were not earlier taken in this direction, were it not that British chemistry has so little to offer for the guidance of the metallurgist. It is, indeed, remarkable that, in a country so pre-eminent as this is in almost everything relating to the production or working of iron, there should have been so little done towards the elucidation of the chemistry of the various operations practised in this branch of productive industry. It may, indeed, be said that while in other countries speculation has been exercised, and experimental investigation has been carried on with that object, the metallurgists of England have surpassed all other countries in the practical working of iron. This is, doubtless, a fact, and it is also one which furnishes reason for satisfaction. It is, however, questionable whether this fact is one of which we can justly be proud, for it must not be overlooked that the results have been attained, to a very great extent, in consequence of the unusual natural advantages that this country possesses for the successful production and working of iron. Thus, for instance, in our immense resources of coal, its abundance, and its excellent quality; in the natural proximity of the ore, fuel, and fluxes, we are far from being equalled by any other country. Moreover, it must be remembered that until very recently iron smelting has been but feebly practised elsewhere than in this country; there has been but little competition from the Continent, and our preponderance has grown up almost in spite of ourselves. These circumstances, together with the national practical tendency, must be regarded as the main elements of our superiority in all that relates to the production and working of iron. In the science of metallurgy, however, and especially in that relating to iron, we must confess to being as far surpassed by continental nations. Our chemists have contributed little or nothing to the explanation of the processes that take place in smelting, refining, puddling, converting into steel, or to the improvement of the methods adopted for these purposes. Almost invariably it is necessary to refer to foreign sources for information as to the chemistry of metallurgy. Since the publication of Mushet's papers on iron and steel there has, indeed, been but one extended investigation carried out in England in connection with the metallurgy of iron—the examination of the composition of the gases from the blast-furnace. Even this was, in fact, conducted by a German chemist (Prof. BUNSEN), and was a continuation of his previous labours in Sweden and Germany.

Under such circumstances it cannot be wondered at that chemistry did not receive much attention from practical metallurgists until the last few years, when the results of the investigations of foreign chemists have, by translation and otherwise, become accessible to the metallurgists of this country. The reason of this difference as regards the cultivation of chemistry relating to metallurgy by the chemists of this country and of the Continent consists chiefly in the fact that many of the metallurgic works on the Continent are carried on under the direct management of the Government, with chemists attached, whose special business it is to investigate questions connected with metallurgy, or that facilities are afforded at the universities or mining schools for the cultivation of metallurgical science.

No opportunities of either kind have existed in this country, and hence the chemist's attention has only by chance been directed to the subject of metallurgy. It is for this reason that we cannot show anything in the way of chemical investigation that can be placed in comparison with the results furnished by the labours of BERTHIER, KARSTEN, and many others of less distinction. Even the literature of metallurgy in England is a blank. We have not a single decent indigenous treatise on the elements of metallurgical science. The few modern works that do exist in the English language are either of American origin, or else meagre and imperfect compilations from French or German authors.

Hitherto this deficiency has not been so much felt here, for the reasons above stated, but now the case has become very different. Foreign countries are entering with energy into the production of iron, competition is growing up; and what is of still more vital consequence, those natural advantages that we formerly enjoyed are gradually diminishing, owing to the progressive exhaustion of our more cheaply worked minerals. At the same time, the price of labour is steadily and surely advancing, while on the Continent it is very materially less than with us. All these circumstances tend to the equalisation of the conditions of production in this country, and others, and loudly call for greater attention to methods of working adopted

English iron-works. It will no longer be possible almost to disregard the waste of material that has become habitual, and appeared unimportant while material was in such excessive abundance and so readily accessible. This waste has existed both in the case of ore and fuel, and is likewise enormous in every stage of the production and working of iron. In the blast furnace twice as much fuel is used as appears to be necessary according to chemical principles. A considerable percentage of iron is sent to the tip in the state of cinder which ought to be reduced to the state of metal. In refining and puddling from 10 to 20 per cent. of the pig is converted into slag, richer in iron than most ores, but in such a state that by smelting it in the blast furnace with other ores the quality of the iron produced is deteriorated. In the mill, again, where the operation is merely mechanical, there is a further loss of some 15 per cent. of the iron.

That such waste as this is not by any means indispensable is evident from the fact that great improvement has been effected as to the consumption of fuel in smelting. It has been calculated that a ton of coal ought to produce a ton of iron, and in one establishment this result has been nearly realised, the average make per furnace for the year ending March, 1857, being upwards of 212½ tons per week, long weight, and the quantity of coal used, including engines, hot-blast, and kilns, was 1 ton 2 cwt. 3 qrs. This fact alone, compared with the amount of coal that is generally consumed in smelting iron, is quite sufficient to justify the opinion that we are on the eve of a complete revolution in blast-furnace management. As to the waste of material generally, the means of improvement are to be derived almost entirely from chemistry, and, consequently, it is sound policy to recommend that the ironmasters should take the chemist into their counsel; that they should place within his reach the best practical experience of the works; give him a fair opportunity of making experiments; and above all that they should remember that success is not always to be obtained by the first or even fifth attempt, but only by patient perseverance through repeated failures.

With such opinions as this prevailing in the minds of our practical metallurgists, we may reasonably hope to attain a position in metallurgy that will be worthy of comparison with our position as practical workers. By the science of metallurgy, too, it must not be supposed that we understand merely the doctrines of the lecture-room, or the theories of the study, the scientific foppery of the dilettante, but positive data and results which have a direct and applicable relation to practical working, which will be at once intelligible and serviceable to practical men. Such a metallurgical science can unquestionably be created only by a combination of extended practical experience and thorough scientific knowledge. Neither alone will make any sure and progressive advance, but together, in metallurgy, as in anything else, they will not fail to bring about the desired results.

The formation of the South Wales Institute of Engineers may be regarded as a very important step towards realising such a combination of the two kinds of ability, as well as towards effecting numerous other desirable results conducive to the improvement of metallurgy. Even as a medium of communication alone between those engaged in the management of mining and metallurgical works, the influence of the institute will be far from unimportant. The situation of works at a distance from each other in remote localities has had the effect of limiting the possibility of engineers benefiting by each other's experience, for meeting seldom they have had but few opportunities for the interchange of ideas, or discussion of questions relating to their pursuits, and hence, as was remarked in the president's address, every man has been, as it were, working single-handed.

In addition to the improvements to be effected by the application of chemistry, equally important results may be looked for from the substitution of machinery for manual labour. The chief difficulty to be encountered here is the transmission of power, rather than its production, which is a matter of comparatively small cost in the iron districts. The conditions under which this transmission of power is to be effected are singularly unfavourable, but a recollection of what has been done in the adaptation of machinery may well justify the belief that when skill and invention shall be as fully directed to the requirements of miners and metallurgists, inventions will be brought to bear that are not less startling in their novelty and important in their results than those which have already been the object of wonder and admiration in other branches of industry.

The attainment of these and other important results appears to be the object that has given rise to the South Wales Institute of Engineers; and fully impressed with the special value of such an endeavour to improve the condition of any industrial art, when it originates among those who are practically engaged in it, we anticipate for this institute a long career of usefulness, and a very influential turn in determining the future progress of our iron industry. In all respects we wish them every success and prosperity, and hope soon to see the example followed in other of our mining and metallurgical districts.

The shares of railway companies have not for some time occupied the position in the market to which many consider they are entitled—a circumstance probably resulting from the large amount of preference or guaranteed capital which the several companies have issued. Unfortunately, the original shares in these undertakings are not all that capitalists could desire; but attention might well be directed to investment in that portion of their capital entitled to guaranteed or preferential dividends. The farthest mode of proceeding is, undoubtedly, to compare this description of railway stock with Consols, and this has been ably done in a small treatise on guaranteed securities,* by Mr. J. WHITEHEAD (of CARDEN and WHITEHEAD, Royal Exchange-buildings). He has collected, and carefully arranged, the particulars of the guaranteed shares and stock of the several railway, gas, canal, and other companies; and in remarking upon the results obtained has some valuable information to capitalists.

It was explained in Mr. WHITEHEAD's former work (entitled *Railway and Government Guarantees: Which is Preferable?*) that preference shareholders are creditors, possessing equitable, but not legal, rights; and that they must be satisfied before surplus revenue can be set apart for future ends. If there be surplus revenue they must be paid their pre-agreed and just claim, or they can enforce payment in a Court of Equity by compelling the directors to account. As to the preference shareholder having claim on the succeeding year's revenue for defalcations in that of the preceding year, it may be stated that where, as with the Great Northern B shares, the Act of Parliament states that the preference shall accrue on the profit made within the year, it is clear that if the 6 per cent. guaranteed in that case by the A holder to the B holder be not earned in any particular year, the profits of the succeeding years cannot be held liable for the short reckoning of the bygone year. Generally speaking, the preference share is created with the right at *per centum per annum*, which, if it mean anything, establishes an account; and if the revenue of any one year be unequal to the preference claims on it, the next or following years must stand debtors—the ledger account showing a credit which has not been satisfied. Such was Mr. WHITEHEAD's opinion in 1848, and in 1858 it has become standard authority. The judgment in the Great Northern suit may aptly be considered the "preference shareholders' declaration of rights." With such a recognition of preference rights in their possession as that judgment contains, shareholders may rest in peace. No more suits in Equity will be undertaken to cripple preference rights; and, if the Legislature will hereafter reject all appeals made to it to alter preference share contracts, the repudiator will hide his robber-head, and preference securities will, as they should, be amongst the most stable in the kingdom.

Railway repudiation is not, as many imagine, of Great Northern parentage; and, though the South Yorkshire Company be a too willing disciple of the repudiatory school, as a matter of history it should be recorded that the Caledonian Company was the first to try its canny hand at the game, with what success the Caledonian Arrangement Act, which received the Royal Assent on the last day of the session of 1851, is the answer. There can be but one opinion that, as a question of abstract justice, a great moral wrong was committed by the Legislature when it passed such an act of spoliation as the Arrangement Act really was. It has been alleged, moreover, that the plea of overhanging insolvency which was set up by the promoters of the Caledonian Arrangement Act was a sham and deceit practised on Parliament.

The decision of the Court of Chancery having raised preference share engagements into debts to be liquidated out of the first available profits of the assuring companies, the basis on which those engagements rest, compared with that they occupied previous to the decision, has been materially widened. The law now rules that, unless specially guarded otherwise, if one year's profits are not equal to the stipulated interest the default made will fall on succeeding years. A ledger account will, in fact, be established, and whenever an unliquidated balance is shown, the same must be carried forward as a debit against future profits, to be satisfied out of them before

the unguaranteed shareholder can pass one penny into his own pocket. If maliciously disposed, the worst the latter can do is to apply profits to capital expenditure; but this, though legal, would be too openly dishonest to be carried to any injurious extent; such a contingency is, in truth, too remote to be worthy of serious consideration in the dry question of investment. Where, therefore, sufficient profits are made to satisfy the claim of the preference shareholder, his position varies but little from that of the guaranteed shareholder. The real difference lies in this, that whereas the former can only look to profits for satisfying his claim, the latter can look to property, and can enforce his right at law. In a word, the preference exists as a claim which may be enforced; its character is passive; the guarantee exists in the nature of a demand which must be met; its character is active. The former shareholder is dependent, and must wait; the latter is independent, and may act.

It is then shown that a larger annual income may be derived from investment in railway guaranteed than from national guaranteed stock. The best selection of guaranteed or preference stocks which an investor can make to choose from is of those which have sound parent companies to back them. No conjunction is needed to make such selection, and then a mere acquaintance with relative merits and prices is all that is necessary to determine the ultimate choice. By the latest published parliamentary railway returns it appears that the total amount of guaranteed and preference capital of all the railways in the United Kingdom was 57,057,171*l.*, the aggregate annual interest guaranteed being 3,227,778*l.* If to this great total the capital which has been guaranteed by the East Indian and colonial authorities be added, it will be seen that an interest-bearing security of immense magnitude (100,000,000*l.* at least) has sprung up within the last 20 years, to become greater still as the formation of railways is encouraged in British dependencies. The amount of guaranteed railway stock in English hands cannot be estimated; it must, however, be very considerable, and will, doubtless, swell into a great total, should money for any length of time become the comparatively valueless commodity it seems likely to. Enough has been said to show the character of Mr. WHITEHEAD's book: all interested should carefully peruse it for themselves.

Is it desirable to permit the liability of shareholders in Joint-Stock Banking Companies to be limited? The reply given to this enquiry, whether it be put to bank shareholders, capitalists, or the public, is by no means unanimous, and it is certain that much may be said on both sides. For ourselves, we contend that if the principle of limited liability be correct there is no reason why the shareholders in banking companies should not be entitled to avail themselves of the privileges accorded to other shareholders. The chief question for joint-stock banks, under the present system, is how to induce the greatest confidence in the minds of the public, so that they may obtain the largest possible amount of deposits, and thus have a far larger capital to trade with than that provided by the shareholders. The mode in which these banks have obtained the confidence they seek, is by proving to the public that their directors are trustworthy, and their managers careful and competent for their duties. How far they have succeeded may be judged from the fact of the London and Westminster Bank alone, with a capital of 1,000,000*l.*, being entrusted with deposits to at least ten times that amount.

It can scarcely be considered that this amount would be trusted to the care of a joint-stock banking company simply on the consideration that the shareholders are unlimitedly liable, and regardless of the integrity and competency of those conducting its affairs; for surely the majority of depositors would be as much inclined to rely on the securities held by the bank as upon the ability of the shareholders, for they may be assured that where the shareholders have to be applied to the result is very unsatisfactory. The confidence of the public is all that a bank, well and honestly conducted, requires; and the way a limited bank must secure that confidence is to fix the capital at a large amount, have the shares all allotted, and but a small proportion of the nominal value of the share paid upon each; thus a limited banking company, with a nominal capital of 5,000,000*l.*, divided into 50,000 shares of 100*l.* each, would be, so long as not more than 10*l.* on each share was paid up, quite as safe for depositors as any existing joint-stock bank; and there would be little difficulty in ascertaining the number of shares subscribed for, and the amount of calls paid up, since in the bill proposed by Mr. HEADLAM it is provided that "Every joint-stock banking company shall, before it commences business, and also on Jan. 1 of every year during which it carries on business, annex to a copy of the Memorandum of Association a statement of the number of shares issued, and the amount of deposit or calls made on each share, in the form contained in the schedule hereto, or as near thereto as circumstances will admit, and a copy of such memorandum, with such statement annexed thereto, shall be put up in a conspicuous place in the registered office of the company; and if default is made in due compliance with the provisions of this section, each director shall be liable to a penalty not exceeding 5*l.* for every day during which such default continues, and such penalties shall be recovered in a summary manner." The form of the statement to be annexed to the Memorandum of Association is:—

The number of shares issued is 10,000. Calls to the amount of 20*l.* per share have been made, under which the sum of 180,000*l.* has been received.—Dated Jan. 1, 1859.

As to the great value of the principle of limited liability we have already expressed our opinion, and are prepared to maintain that the extension of that principle to banking will be productive of general good. Greater banking facilities will be offered to the public by a system of competition being introduced, and commerce generally will be materially assisted by the encouragement which an improved banking system will offer for speculative individuals to embark in joint-stock companies formed for carrying out commercial undertakings.

At the annual meeting of the GOVERNOR and COMPANY OF COPPER MINERS IN ENGLAND, one of the proprietors stated that it was a standing reproach to the company that there still should be due to the Church and School Fund a sum of 1933*l.* 3*s.* 7*d.* These sentiments found a willing echo from all who were in the room. The same generous feelings we have heard enunciated at previous meetings where this important subject has been mooted; but, unfortunately, though many of the proprietors have promised to subscribe, yet, so soon as dividends are received, they forget to ask the secretary to deduct the sum necessary to pay their *quota* to the Church and School Fund debt.

We have received from several correspondents various suggestions as to how this debt should be liquidated; it has been proposed by some that it should be written off the general account. On the other hand, it is said that if such should be done the whole burthen would fall upon the stockholders, who have already embarked so large a capital, receiving but a minimum rate of interest, and not upon the preference shareholders, who, since the resuscitation of the company, have every year had punctually paid to them their 7½ per cent.

In the hamlet of Michaelstone-super-Avon, where the works are situated, according to the report of 1853, it appears there is a population of not less than 6500, of which fully three-fourths are Welsh, and the remainder English. The whole population, with the exception of a very few persons, are entirely dependent on the works of the company. Were it necessary we could comment more diffusely on the report; this, however, is foreign to the subject. The Governor and Court, both collectively and individually, it appears from the subscription list, have liberally contributed towards the liquidation of the church and school debt, and had the preference shareholders, who have received their dividend of 7½ per cent. for six years regularly, consented to have foregone but a small proportion, there would have been no necessity for these constant appeals being made to their philanthropy, which the majority, it appears, respond to in public, but negate in private.

The Governor, Mr. GILBERTSON, and several other gentlemen, whom it would be invidious to mention, have nobly subscribed, in order that proper spiritual and educational aid should be afforded to the operatives employed on the works; and at the annual general Court some gentlemen generously came forward and offered to subscribe certain sums of money, provided others would do the same. This is all very well in its way, but the matter ought not to rest here, or be solved in this manner. There can be no question but that on this subject all those who are connected with the establishment are intimately concerned; a well-directed and properly organised community are better able to be ruled, and will effect much more work, than a disorderly rabble without any governance of their passions or control of their feelings, ruling themselves on the axiom—"Sufficient for the day is the evil thereof."

Since the resumption of the works by the company, it would appear that the desire of the Court has been that not only the material condition of the labourer should be ameliorated, but likewise that his moral position should be enhanced. The progress of those who have availed themselves of the

advantages afforded to them by the company's schools can be seen by referring to the reports of the Government Inspectors of Schools. From these it is shown that the disciples of the Cwm Avon school are not only able to compete with the other diocesan establishments, but that, in many instances, their acquirements are superior and more solid.

The appeals to assist this good work, which have hitherto been made to the proprietary, have met, as yet, with little response from the general body. According to the charter, an annual meeting must be convened in April, to discuss the accounts and declare the dividend. A very full attendance is generally found there, and the church debt is merely alluded to when the general business is concluded. If the Court were to call an extraordinary meeting, solely for the purpose of discussing the subject of the Church and School Fund we are inclined to imagine, there being no other subject before the proprietary, that in the accounts of 1859 this reproach and disgrace would no longer exist.

The BON ACCORD COPPER MINING COMPANY recently held their first annual meeting, and, judging from the proceedings, it is probable it will become a highly profitable undertaking. There were certain facts elicited which prove the estimation the property is held in by parties resident on the spot, and best calculated to obtain correct information. The Hon. GEORGE HALL, who has been for some years a director of the famous BURTA BURTA Mine has resigned his seat, in order that he may devote his whole time to the Bon Accord: Mr. HALL, who is a member of the Legislative Council, has associated with him the Hon. ABRAHAM SCOTT, another member of that body, and Mr. TAYLOR, a partner in the well-known firm of ELDER, STIRLING, and Co., merchants of Australia. CAPTS. KILLICOAT and JEFFREY, who were recently in the employ of the BURTA BURTA Company, have also joined the Bon Accord; and they state that they have watched the mining operations of the former company from first to last, and anxiously observed the heaves and slides of the BURTA BURTA lode, and that a small outlay will prove the truth of their representations, as they will point out the precise spot where they believe the copper is to be found, and give practical directions as to the manner in which the mine should be worked so as to save time and needless outlay. Perhaps no stronger proof can be given of the opinion of the value of the property entertained by CAPTS. KILLICOAT and JEFFREY, than the fact that, with the exception of a small amount to cover their preliminary expenses, they make their remuneration dependant upon realising a net profit of 10,000*l.* for the proprietors, and that within one year and nine months from the time of commencing operations, or to forfeit all fee or reward. Whilst every exertion has been made in the colony the proceedings at home have been conducted with the greatest care and economy, and reflect great credit on the directors and their able secretary; for although only half the capital has been subscribed, the interest upon the balance in hand, after paying 24,000*l.* for the property, has been more than sufficient to meet the whole of the preliminary expenses, and the amount in hand applicable to develop the mine reaches nearly 12,000*l.*, the whole of the arrears being only 25*l.* 10*s.*, out of 37,500*l.* The despatches received by every mail will be looked forward to with great interest; and, as the well-wishers of mining in all parts of the world, we heartily wish the Bon Accord Company success.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

MAY 20.—Although a single week cannot be expected to produce an entire change in the state of business throughout our large district, still a very perceptible alteration has occurred here within the last few days. It may be only one of those delusive spasmodic revivals to which we had occasion to refer last week, but the present consequences at least are satisfactory, and part of the dreary prospect which surrounded us is removed. The docks begin to be full of shipping once more, and at the present time rather large quantities of railway iron are being sent away. The supply of coal is still larger than the demand, but owners seem to feel more confidence, and to entertain less apprehensions of a long continuance of depression. We cannot conceal the fact that within the past few months hopes have been excited by similar incidents, only to be disappointed by another change, which appeared to place us farther than ever from the desired point. The slightest signs of activity were regarded as the forerunners of a certain period of prosperity, but, with scarcely an exception, these expectations have not yet become realised. In individual cases support may have been received sufficient to prevent any difficulties from being experienced; but these instances are rare, and few indeed are the ironmasters who have not suffered unavoidable losses. We can only repeat our hope that the present indications of the approach of a more favourable time will lead to a substantial result, and that we shall speedily pass through an unfortunate season.

Although the demand from Germany and France—both large consumers of iron, &c., from this district—is by no means according to the usual rate, still the preference always shown for our produce continues to be manifested. The German demand is almost as important to some works as the American; and the fact of both being uncertain just now operates, of course, disadvantageously. Since our last report, however, several orders have been received, giving an impetus to trade in one or two directions. The Tredegar Company always do a large business with the Continent, their railway iron being in great request. In France the annual consumption of it is somewhat large, but latterly, as may be supposed, not so much has been sent. The company, as has been recently shown, have to thank, in no small degree, the narrow policy of the French ironmasters for their success.

We understand that affairs are wearing an improved aspect at Blaenavon. We are informed on excellent authority that the differences between the directors and the shareholders have at length been settled, and a perfect understanding among all parties is said to prevail. By what means the *entente cordiale* has been restored we are not in a position to reveal, but we believe it is certain that one immediate result of it is, that the new forge, so long talked about, is to be commenced without delay, and finished as soon as possible. Indeed, the work has already begun. This intelligence will afford great satisfaction to the shareholders in the Blaenavon Company, who have long suffered grievously through disputes and disagreements. The works are at present more busy than many in the district.

The Nant-y-Glo Ironworks are going on very steadily, and to all appearance prosperously. Several good orders are now in hand. The management is actively looked after by Mr. Crawshaw Bailey, M.P., and the men have given up the idea, which they once entertained in common with their neighbours, of turning out on strike. A good feeling at present exists, and there are even whispers of increased wages, but we have no reason to suppose that there is any ground for such rumours. Terms will not be raised till all the masters are in a position to coincide in the movement; and as they were reduced at one time throughout the district, so doubtless will they be augmented.

We alluded last week to the conversion of what is deemed a public thoroughfare into a railroad by the Tredegar Company. The neighbourhood is still excited on the subject, and the directors are threatened with the penalties of the law. A man was killed on it last Thursday, and an enquiry took place into his death. Nothing of general interest has yet transpired in relation to the matter.

Two more of the men injured in the colliery explosion at Machen have died, thus leaving only one alive out of those present at the time the accident took place. They were all horribly burnt, and suffered great torments. The inquest will take place in a few days.

We mentioned a short time since that the colliers employed by Mr. Josephs in the Rhymney Valley had struck in a dispute about wages. The disagreement has led to the committal of several persons to prison. Some fresh men were engaged to work in the pits, and the old hands tried to induce them not to keep their promise; but when quiet measures failed they foolishly resorted to riotous ones. An attack was made on the strangers, and several of the ringleaders were apprehended, brought before the Merthyr magistrates, and sentenced to two months' imprisonment. It is to be hoped this punishment will act as an effectual warning to the other thoughtless fellows. A printed notice, however, has been placarded about Rhymney, calling the workmen generally to a public meeting to resist the masters, and a strike is not improbable.

There would seem to be no doubt of the fact that the Admiralty have directed South Wales steam-coal to be used henceforth for naval purposes, thus virtually deciding on its superiority over Newcastle coal. Several new contracts are talked of, and it is stated that an Aberdeen firm is now engaged to supply 20,000 tons of coal for Government steamers. In Car-

* *Guaranteed Securities: their Merits as Investment.* By JOHN WHITEHEAD. London: The author, and Edgingham and Wilson.

diff the matter is regarded as decided, and the rejoicing is great at the triumph over the detractors of Welsh coal. Nothing fresh has occurred in relation to the "trial" spoken of a little while ago. We are sorry to find that at Tredegar the workmen are complaining bitterly of the way they are treated at the company's shop; with their present low wages, the hardship of being obliged to buy everything at a dear rate is felt to a painful extent. It is even said that the bread sold is shamefully short of weight—excessive in cost—eighteen pence being charged for a loaf weighing 9 lbs. 6 ozs. ! We know that tea, which may be bought at the grocers for 3s. 4d. a pound, is sold at the company's shops for 5s. 8d., or 6s. 8d.—preposterous prices! This is a terrible hardship for the workmen, and we hope to see the day when the truck system will be greatly reformed. We shall shortly present a few reliable facts on the subject, which will show how injurious are the general results of the custom.

An anniversary festival has been held at the Cwmavon Works. The chair was taken by the respected manager, Mr. W. Gilbertson. The proceedings were of a satisfactory and pleasing character.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

MAY 20.—The trade of the past week has slightly improved, and orders have come in more freely. There is also a more active enquiry for rails, for which there are several large orders in the market. The advices from the United States are of a more favourable character. The steel trade is improving, and in the file business at Sheffield several manufacturers have put their workmen on full time. Messrs. Naylor, Vickers, and Co., of Sheffield, the eminent steel merchants, who suspended during the late panic, have issued a circular offering to pay their creditors in full. In November last they were allowed to pay their liabilities by four instalments of 5s. each, at stated periods, the last payment to be made in April, 1859, with interest at the average rate of the Bank of England.

The Coal Trade continues dull; indeed, much more inactive than usual, even at this dull season of the year, whilst from the large stocks on hand at the stations of the Great Northern Company's line, it is not expected that there will be much demand for some time to come in that quarter. Indeed, from all appearances, it is more than likely that there will be a gradual falling off in the company's orders, seeing that they are getting some of their coals from other markets, the coal masters in this district not being able to make a sufficient reduction to keep the orders at home. The reduction of wages in Durham, Derbyshire, Leicestershire, Staffordshire, and Nottinghamshire, enabled the coal masters in those counties successfully to compete with those in this district, where the men have succeeded in maintaining the old rate of wages. However, while there appears to have been a falling off in one important customer, it is gratifying to find that Mersey, about five or six miles from Liverpool, has been a comparatively small quantity of coal was shipped thence to America, but there is now every prospect of there being a tolerably good demand. The coal sent out has been principally the Silkestone nuts and steam coal for gas. During the last fortnight about 2000 tons have been shipped. This trade will be further facilitated by the efforts now making for a line direct from Liverpool to Garston. The heavy rates on the London and North-Western Railway between Manchester and Stockport are likely to introduce the south Yorkshire coal to the public of the latter place, a small quantity having already been sent to Guide Bridge, the nearest station to it. The directors of the Mill Hill Colliery have been in a movement amongst the colliers of Derbyshire, work only eight hours per day.

On Wednesday a meeting of the directors of the Mill Hill Colliery was held at Hucklelow, for the purpose of signing an agreement for the renewal of the lease, and also to decide on the site for a new shaft. The terms for the extension of the lease were considered satisfactory, and the agreement was duly signed by the directors. The lease will, therefore, be extended for twenty years beyond the expiration of the present term.

A terrible explosion took place, on Monday morning, at the ironstone pit of Messrs. Yates, Carrington, and Co., of the Derby-lane Iron-works. The pit in which the accident occurred is called the "Hanger Pit," and is 94 yards deep. On Saturday afternoon a quantity of water was cut, which flowed into the works, and in consequence the men were detained until seven o'clock on Saturday afternoon. On Sunday the pumping operations ceased, and no work was done at the pit, except to renew the bucket. On Monday morning the engine man noticed that something was wrong with the pumping apparatus, and as he perceived that there was not so much water lifted as usual, he requested one of the workmen, named Timms, to go down and examine the pumps. Timms accordingly went down to the first lift, where he found in working condition, and believing the defect to arise from the bottom lift, he was drawn up the shaft, procured the necessary tools, and took down with him his assistant, John Jefferys. This was about twenty-five minutes past eleven o'clock. A miner, named Spike, also went down the shaft to inspect the pit with regard to water, and he found that the water had risen to within 1 ft. or 1½ ft. of the roof. Thomas Bradshaw, the deputy of the pit, and Wm. Biogden, the bankman, then went down to rescue two asses, which they considered were in great danger of being drowned. They took with them a safety-lamp and an oil lamp, and went down the shaft: in about ten minutes after they had been down the explosion occurred, and such was its force that it blew the caps off the heads of the workmen who were near the mouth of the shaft. It is not yet known what damage has been done to the workings. The brick lining of the bottom portion of the shaft was dislodged by the shock, and the debris buried the unfortunate men underneath it, supposing they had been so fortunate as to escape up to that period. As soon after the accident had taken place as possible, two men were sent down the shaft to make an exploration, but the after-lamp was so great that no person could be let down with safety. Mr. Richardson, the agent of the works, directed the men to turn the course of the water into the stream belonging to the top lift of pumps, so as to prevent the increase of water at the bottom of the shaft, and to purify the air. This was done as effectually as possible, and on Thursday the debris had been so far removed as to lead to the discovery of the bodies of Timms and Jefferys.

The search for the remaining two is being continued, and it was expected they would be recovered by Friday. An inquest will be opened *pro forma*, to enable the coroner to issue his certificate for the burial of the bodies, but the nature of the accident will not be enquired into until next week. The names of the four men killed are Thos. Bradshaw, deputy, left a widow; W. Biogden, a widow and five children; Wm. Timms, a widow and three children; and John Jefferys, a widow, no children. It is to be regretted that the Coal Mines Inspection Act does not extend to ironstone mines, though in this case we believe the responsibility of the accident will rest on Bradshaw, who has sacrificed his own life, and that of others, by using an oil lamp instead of a safety-lamp. At Bolton, on Monday, Mr. Samuel Sowercroft, of Burdon, was summoned for working a coal mine without a proper signal between the surface and the bottom of the shaft. A knocker line was used, and the magistrates were, therefore, not manifestly in the Act had been infringed. It had been universally held until now that shouting down a shaft, or striking a piece of iron, was not a proper signal; and to support these decisions he must appeal to the judges. It was agreed that a signal should be put down to avoid the necessity of appeal. Mr. Sowercroft was fined 11s. for neglecting to ventilate the mine sufficiently, upon a second information; and his underlooker was fined 10s., and costs, for permitting two air-doors to be so fixed as not to close of themselves.

At Wakefield Petty Sessions, John Goldthorpe, engine tender at Haldy Moor Colliery, Whitwood, was committed to prison for one month for violating the rules of the colliery. On March 2, a man named Crowther, and three other men, were working in the Act within two or three feet from the bottom, the cage suddenly stopped. The other three men got out; but, whilst Crowther was in the act of doing so, the engine was again set in motion, and Crowther was partly drawn up the shaft, until his head came in contact with a beam, when he was precipitated out of the cage and killed. Some blame at that time appeared to be attached to Goldthorpe, who, it was stated, had set the engine in motion without the usual signal, thereby violating the special rules and by-laws of the colliery. At the inquest a verdict of "Accidental Death" was returned, but Mr. C. Morton intimated his intention of bringing the matter before the magistrates.

THE IRON AND METAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT AT WOLVERHAMPTON.]

MAY 20.—Taking the general balance of statements, it may fairly be said that the Iron Trade in this district exhibits some symptoms of improvement. In addition to the East India orders there is a rather better home demand, whilst the continental orders are slightly larger. There is not much doing for the United States, but some firms are receiving a few fair orders. There are also hopeful signs presented which give promise of a further gradual improvement. Messrs. Naylor, Vickers, and Co., of Sheffield and Liverpool, who were compelled to suspend payments in November last, have announced their ability at once to resume payments instead of, as was arranged, extending the liquidation of their liabilities to April next year. This firm dealt largely with this district for the American market, and their recovery will very greatly affect the position of one South Staffordshire house, and will benefit the trade generally. The Messrs. Dennistoun, too, are prepared to anticipate the payment of their third instalment, paying it at the end of this month instead of at the end of December in the case of the London, and at the end of January in the case of the Australian bills. The rapid recovery of these houses gives good ground for hope that the effects of the late crisis are passing away, and tend to strengthen the conviction, which everything has inclined to, that scarcely any really sound concerns have suffered more than temporary losses from the late panic. Their speedy recovery is chiefly attributable to their American assets being better realised than they anticipated, which is also an encouraging circumstance.

The Hardware Trades are, on the whole, a shade better. The tin, and Japan, and hollow trades being rather busier, but other departments are not much improved. The Birmingham trades, which have been more seriously depressed than those of Wolverhampton and South Staffordshire, are gradually recovering, and this is strikingly confirmed by the rapid diminution in the number of paupers receiving relief. On Friday last Messrs. Brayford and Lancaster, iron manufacturers of the Birchills, Walsall, and Greta Green Works, who failed in November last, came up for their certificate. It had been understood that all accounts that could be furnished were to be placed before the assignees between the last examination and the certificate meeting, but it was stated on behalf of the assignees, and generally admitted, that the books of the bankrupts threw no light whatever upon the cause of the immense losses which they had sustained. The balance-sheet commenced in July, 1855, at which time stock was taken. At that time the bankrupts estimated that the value of their works exceeded the amount of the mortgages upon them by a little more than 3000l., so that in fact they had then no available trading capital and but little property, considering that they had three works in their hands. In Nov., 1857, when stopped, they owed to unsecured creditors 42,000l., besides being liable on bills to the amount of 26,000l., and their assets will only realise about 4300l. It was impossible from their books to ascertain how their losses had occurred, but Lancaster calculated that they had lost 20,000l. by selling iron below cost price. He acknowledged that, although iron manufacturers, buying pig-iron for the purpose of converting it into manufactured iron, they had resold pig-iron sometimes at a loss; that they had sometimes purchased iron, giving their acceptances to Mr. Samuel Griffiths (who was largely concerned with them), that they had not receiving the iron at all, but getting other bills to balance the account, and that in like manner they had sold iron when they did not deliver it, but gave bills in exchange. Sometimes Mr. Griffiths sold them iron on contracts, to be delivered at some future time, getting acceptances on account of the future contract. The other bankrupt (Brayford) at once said that, not having had a month's schooling in his life, he knew nothing about the books. He stated that when he joined Lancaster, in 1854, he regarded the latter's share of the value of the works as worth 2200l.,

and he advanced a like amount. He afterwards advanced 7500l. to buy a works at Greta Green, in which Lancaster had no share. Mr. Griffiths effected this purchase, and had the handsome sum of 500l. for executing the commission. The result, however, was that apart from bad debts the losses at this work amounted to 12,000l. The bankrupts had never taken stock since 1855, although it is the practice amongst the leading ironmasters to do so every three months. The assignee asked the Commissioner to suspend the granting of the certificate for a considerable time, on account of the reckless manner in which the bankrupts had squandered the money of their creditors. Mr. John Smith, solicitor, on behalf of Lancaster, urged that the iron trade was so uncertain that it was a mere chance whether men gained or lost. Mr. Commissioner Balguy reserved his judgment; and in giving it on Tuesday adopted the view urged by Mr. Smith, describing the iron trade as "extremely capricious" and "peculiar," said persons might go on "losing" in the hope of subsequently "winning." He excused the bankrupts for not keeping books on the ground that they were not men of education, faintly censured them for not taking stock, and regarding the fact of their having put some 10,000l. into the trade and lost it as a very favourable feature, granting them a certificate of the second class forthwith.

The principles laid down in this judgment strike at the very roots of commercial morality. It represents trade, or at least one trade, as a mere matter of luck and chance; it passes over dealings of a character which could have no other result than ruin without a word of censure, and it excuses men having no knowledge of the state of their affairs when they were absorbing in their business thousands of pounds belonging to their creditors, on the score of their inability to keep accounts, which ought to have been a reason for their abstaining from a course of trade to which they were utterly incompetent; and, in a word, it destroys the moral distinction between the successful and the failing man of business, representing the one as merely lucky, and the other as unlucky. In 1855 the value of iron was 10s. 6d. per ton from the very high price of 10s. 9d., which is a very good price, and the trade rate was never altered until after the bankrupts in this case failed. True, it was sold at lower prices by such men, as they, being in constant straits, were forced to sell at any price; and if losses were sustained during those two years, it was owing to the existence of such men as ironmasters, maintained by the money of bank shareholders and deluded creditors. The judgment has naturally been strongly censured in this district.

The Working Men's College had a picnic party to the Wrekin, a conical hill near Wellington, in Shropshire, forming the termination of the Cornish range, and rising to the height of 1320 ft. above the level of the sea. A geological party left the train at station some distance from Wellington, and accompanied by their teachers explored the various points of geological interest presented in a district where there has been a great amount of disturbance, and which, consequently, presents unusual varieties of strata. These picnics, which include ladies, and in which the teachers of the classes join, form a pleasing feature in the new institution. The students returned with a considerable store of specimens of trap, Silurian, and many other rocks.

It may be remarked that the speech of Mr. Ricardo, on the injury to Hanley from mining operations, is a remarkable and almost an absurd exaggeration of the effects of the getting of ironstone there. No doubt some districts have suffered, but the wreck he pictures exists nowhere but in his own brain.

REPORT FROM NORTHUMBERLAND AND DURHAM.

[FROM OUR CORRESPONDENT.]

MAY 20.—We have no change of importance to notice in the Coal Trade this week. Freights continue very low.

An accident occurred last week at the Framwellgate Moor Colliery, near Durham, by which one of the workmen was killed. There are two pits at this colliery, which is an expensive undertaking. Two seams are worked by means of one shaft—the Hutton seam, at a depth of 40 fathoms, and the Beaumont seam, at a depth of 80 fathoms from the surface. Martin Cobby, a horse shoer, went into the Hutton seam for the purpose of shoeing horses, and, after finishing his work, he, it appears, went to the shaft and gave the usual signal to be drawn up. This, it appears, had not been attended to immediately; and when the cage was drawn up it was found that he was not in it, as expected. It was then found that he had fallen to the bottom of the shaft, which caused his death instantaneously. It is surmised that he, finding the signal to be drawn up not attended to, had attempted to get out of the cage, and in so doing was caught by it and thrown down the shaft. Many serious accidents have occurred in a similar manner to this which ought to make miners extremely cautious in such cases, and especially when no one is in attendance to give the signals, which is often the case when coals are not being drawn up.

A shocking and fatal accident also occurred at Old Durham Colliery, on Thursday last. A boy 12 years of age, named Taylor, was requested to oil the pulleys, or wheels, on which the wagon rope runs; and after he had done this he very stupidly seated himself upon the large horizontal wheel which leads the rope back again to the engine at the pit. In a moment the engine was put on, and he having his legs through the spokes of a wheel, they were very extensively engaged in the pulleys, and he was completely crushed to pieces. Death was instantaneous. A coroner's inquest was held on Monday, when the jury returned a verdict of "Accidental Death." It is not stated whether this wheel was faulty; but we think that all wheels of this description ought to be securely nailed off, so as to prevent access to them.

An interesting example of the good feeling which often exists between agents and workmen was witnessed at the Shotton Colliery, last week. The officials and workmen of the colliery having presented to Mr. George Brown, viewer at the colliery, who is about leaving for South Wales, a handsome watch and chain, as a mark of their esteem.

A local and private bank, lately established at Alnwick, which it appears has been long desired in that town, and will be a great accommodation to the inhabitants and others. But a correspondent of one of the Newcastle papers writing on the subject makes, I think, some very extraordinary and unfounded remarks. He states, after giving the names of the partners to this bank, as follows:—"Those names will be a sufficient guarantee to the public that the monies entrusted to their care will not be recklessly squandered, or sunk in mines, collieries, shipbuilding, and other equally rotten speculations, but be husbanded, and confined solely to legitimate banking."

Now, we certainly were not aware, before seeing this sage production, that mines, collieries, and ships, were rotten speculations in the North. On the contrary, we fully believed that those speculations, when judiciously entered into, and carried out by real capitalists, were among the soundest, safest, and, withal, the most remunerative of enterprises. Nor do we yet see any reason to change our opinion. Coal, we need scarcely remark, is our grand staple, and ships, mines, and collieries, the principal source of our prosperity. If those were to turn out rotten speculations, Newcastle would soon cease to be the metropolis of the North. But to refute the opinions of this correspondent, we need only mention the name of one of the partners in this new banking firm—that of Mr. H. Taylor. This gentleman's name is a host of itself. It is well known that he is a shipowner, a very extensively engaged in mining and collieries, and is at the present time engaged with an extraordinary winning for coal at Kylesborough, which has every appearance of becoming speedily successful, and will, we doubt not, prove the very reverse of a rotten speculation.

We have had, it is true, too many rotten banks in Newcastle, and the monies entrusted to them has, to use the mildest term, been recklessly squandered; but we must not, on account of this, charge such losses to the account of legitimate mining, ships, &c., as such a charge would lead to the most erroneous conclusions. The feeling with respect to the lost railway (that is, the loss of the bill for the Border Counties Railway) has not subsided, but, on the contrary, as the subject is discussed becomes every day the more interesting. The inhabitants of the towns of the South of Scotland—Hawick, Selkirk, Peebles, and Galashiels, and the villages of the counties of Selkirk and Roxburgh, who are the parties principally aggrieved by the recent decision of the Committee, are not disposed to submit quietly to the blow which has been struck at their commercial prosperity, by preventing them getting a communication with the north-east ports of England. In those towns and seaports, too, a strong feeling exists on the subject. However, it is evident that, if any further movement is made on the subject at present, it ought to originate in Scotland, but it will not want support here. Already a private bill to open a new line of railway from the Borders to the Forth, and landowners of Southern Scotland to wait upon the Ministers and demand a Royal Commission to enquire into the manner in which the isthmus of the North is to be traversed. As we stated before, it appears quite absurd for the two schemes to be placed in opposition to each other, as the Caledonian Extension still leaves the third avenue from Scotland to the south by the valley of the Liddel and North Tyne unoccupied. This third or middle passage from Scotland to England will, no doubt, be had sooner or later. It is understood that the public meetings which took place in Scotland will be followed by more energetic measures, and other public bodies, chambers of commerce, &c., on both sides of the Border will be put in motion.

We think no apology is needed for noticing here the death of Mr. Thos. Wilson, which occurred lately at Gateshead Fell, at the advanced age of 94 years. He affords an excellent example of what can be done by steady perseverance under the most unfavourable circumstances. He was born at the above place, and, at the early age of eight years, was employed in the coal mines there as a door-keeper. It will be readily acknowledged that at that time the facilities for acquiring knowledge were much less than are at present enjoyed by those employed in our coal mines. Boys at that time were employed fully 16 hours per day; yet, although this exemplary man was employed in that way for several years, he continued to work in the mine until he was 19 years of age, he, by attending a night school, contrived to acquire sufficient learning to enable him to teach a small village school, which he commenced at that time. Afterwards, he entered a mercantile office in Newcastle as a clerk; and, after many years of patient toil and many struggles, he ultimately became a partner in the extensive iron firm of Loth, Wilson, and Bell, at Walker Iron-works. He was the firm friend of literature and education, was instrumental in the establishment of public rooms, library, and also a school for the education of children at his native place. He was also a poet; perhaps the only one which has been produced from the class of coal miners in the North. His principal poem is the "Pitmen's Pay," which contains graphic pictures of the manners and customs of pitmen in the last generation.

The North Seaton Colliery Company have invited tenders for sinking two pits, 15 ft. diameter, at North Seaton, near Blyth; two 120-horse power engines, high and low-pressure; a 30 to 40-horse high-pressure engine; two engine-houses, suitable for the above engines; also 30 workmen's cottages.

NEW BLAST FURNACES ON THE TYNE.—Passengers to and from Tyne-mouth by the Tynemouth branch of the North-Eastern Railway, or by the river steamers, will have observed that four new blast furnaces, for the production of pig-iron, have been erected at Jarrow. These furnaces have been erected by the Messrs. Palmer, the eminent iron shipbuilders, Jarrow, and they are the largest in England. The works are most extensive and elaborate, and cover a large area of ground, which had to be prepared and adapted for their reception. The whole of the works, machinery, engines, &c., are laid out in the most complete manner, and so admirably adapted are they to serve the purpose of their erection, that they have excited the most intense interest in the minds of the iron producers of Great Britain. Many of the largest ironmasters in the kingdom have paid them a personal visit, and inspected them with the utmost interest; and the plan upon which they are constructed is acknowledged to be the nearest towards perfection yet discovered, either as regards the making of iron or the saving of labour. The blast, instead of being produced with the ordinary single beam engine, is the result of the operation of five single engines, each of 60-horse power, and driven at a great speed—a speed of about 70 revolutions per minute. Each furnace is 60 ft. in height from the ground to the gangway, and 12 ft. from the gangway to the summit, or a total height of 72 ft. from the ground, and they are 17 ft. across the boshes. Two of them have been in operation for the past three weeks, and the other two are rapidly approaching completion, and will be shortly in action. The whole are in full operation, it is expected that they will produce from 800 to 1000 tons of pig-iron per week. To produce this quantity of iron they will require an annual supply of 350,000 tons of ironstone, coke, and limestone, and they will furnish employment to 200 or 300 men. The iron and limestone will be brought from the Cleveland and Whitby districts by the iron screw steamers which carry coals from the Tyne to the metropolis. The steamers having discharged their cargo of coals in the Thames, call, on their return northwards, at Port

Mulgrave, a harbour constructed by Mr. C. Palmer, at a few miles to the north of Whitby, for the purpose of loading these steamers, where they receive a cargo of ironstone and limestone. They are unloaded at the Tyne at a wharf in front of the new furnaces, by a combination of hydraulic and steam cranes. The raw material is obtained with great facility, and at a cost much below that consumed by many other furnaces. Such is the advantage of the arrangement, that the *Northumberland* screw steamer, one of the vessels engaged in the London coal trade, in the last voyage made, delivered upwards of 600 tons of coal in London, called at Port Mulgrave on her passage down to the North, where she took in 600 tons of ironstone, and discharged it at Messrs. Palmer's wharf before the expiration of a week. The engines of the furnace have been built by Messrs. J. B. Palmer, the eminent builders of marine engines, and are driven by ton boilers, worked at a high pressure.—*Newcastle Chronicle*, May 21.

THE NEW ELLIPTICAL BLAST-FURNACE.

In fulfilment of our promise, we purpose giving a detailed description of the American Double Blast-Furnace, recently patented in this country by Mr. Charles Coffey Alger, of Newburgh, Orange co., New York. Blast-furnaces for smelting iron ores have hitherto been constructed of a square, polygonal, or circular form in their horizontal sections through either the hearth or the boshes; and, as it is necessary to the proper working of a furnace that the blast of air should penetrate the whole charge equally, experience has demonstrated that with heavy coal, such as anthracite, a diameter or width of about 5 feet in the hearth is the maximum limit of capacity for the proper working of such furnaces in order to make good iron. Even with that capacity a blast of from 4 to 5 lbs. pressure on the square inch (depending on the quality of the coal) is necessary, the great weight of coal admitting of such pressure; but, with lighter fuel, such as charcoal, bituminous coal, and coke, which is easily lifted, and the fine particles forced up by the blast and lodged in the boshes, and which, therefore does not admit of so heavy a blast, the furnace cannot advantageously be made so large as 5 feet in width or diameter of hearth; and, with the proportions indicated, the use of a blast of heavy pressure is attended with serious inconvenience on account of the expansion which the air undergoes in the cavities or opening of the charge, as such occasions inequality in the distribution of the body of air. The main objection, however, arises not only from the great cost of machinery and power to produce and maintain a uniform blast of heavy pressure, but from an increased consumption of fuel, all of which add greatly to the cost of erecting and running furnaces under such conditions.

Ironmasters generally believe that the relative proportions of the hearth to the boshes should be about as one to three, and that the diameter of the hearth should not exceed 5 feet, to work with economy and produce the best quality of iron. The product cannot be increased with economy by increasing the diameter or width of the hearth much beyond 5 feet, because that necessitates at times a still greater increase of pressure beyond 5 lbs., and such increase of pressure would not only be attended with a still greater proportional consumption of fuel, but besides it is liable to injure the strength and quality of the iron. Again, if the hearth is increased in diameter much beyond 5 feet, whenever the furnace loses its required heat, which often occurs, a hard mass is liable to form on or about the middle or back wall of the hearth, below the tuyeres, to the great detriment of the smelting process. These masses, when once formed, remain for a length of time after the furnace is brought back to the temperature required for making good iron. For these reasons it has been universally recognised that there is a practical limit to the capacity of such furnaces, and although it has long been known that it would be a source of great economy if the capacity of furnaces could be materially increased in some way suitable to production of good iron with the blast not exceeding the pressure usually employed; yet, prior to this invention, no plan has been proposed which would attain the desideratum. The object which Mr. Alger had in view was the production of a furnace which should have the required increase of capacity, and which, at the same time, should preserve what is recognised as the proper relations of the blast to the charge. To accomplish this, he makes the furnace of an elliptical or oblong form in the planes of its horizontal sections, from and including the hearth, and has two mouths, one at each end, and one or more ranges of tuyeres in each of the two opposite sides, so as to introduce the blast in the direction of the breadth of the hearth. The boshes, as well as the stack, are of an elliptical form, and in all other respects bear the same relations in form to the hearth that they do in furnaces of the ordinary construction. The breadth of the hearth is to be determined by the kind of fuel, and the pressure of the blast, with a view to the quality of iron to be produced and economy of fuel; the length of hearth being regulated by the quantity of iron which it may be desirable to smelt in a given time.

The advantage is obtained by the arrangement we have already explained, and it is believed that the results cannot be produced by any other known means. The economy is enormous, as it is well known that the greater the quantity of ore and fuel which can be in preparation and reduction at one time the less will be the relative cost of the smelting process, as the labour and number of keepers will be much less in proportion to the product of iron, which, under such conditions, will produce more soft iron with less fuel. The invention is said to be also applicable in the construction of cupola furnaces. We understand that the merit of the proposition, so far as regards its application to blast-furnaces, will speedily be tested, and we shall lose no time in laying the practical results before our readers.

MANUFACTURE OF IRON.

We this week give the concluding part of Mr. Sanderson's paper on "Iron: its Commerce and Staple Manufactures." A series of elaborate tables is appended, showing the precise quantity, in tons and money, which the several foreign countries have taken, and gives an excellent summary of the total exports of iron during the years 1856 and 1857, with the equivalent in pig-iron, from which it appears that there was an increase, in 1857, of 174,604 tons, or 8½ per cent. in weight, and of 2,156,605l., or 10½ per cent. in money. The figures are:—

SUMMARY OF TOTAL EXPORTS OF IRON TO ALL COUNTRIES IN 1856 AND 1857.

Description.	Exports.		Declared value.		Equiv. in pig-iron.	
	1856.	1857.	1856.	1857.	1856.	1857.
Pig-iron.....	357,326	423,215	1,385,118	1,611,467	357,326	423,215
Castings.....	72,394	72,780	712,177	754,619	76,012	76,119
Rails, bar, bolt, and rod ..	701,873	721,401	6,217,524	6,287,965	935,830	961,568
Plates, sheet, and sundry wrought-iron	276,259	280,212	3,729,433	3,979,398	368,245	373,616
Steam-engines	—	—	819,067	1,062,236	51,694	70,817
Sundry machinery	—	—	1,897,386	2,629,737	94,869	131,036
Hardware	34,738	39,260	3,747,598	4,016,227	74,952	80,236
Steel	21,858	22,321	735,923	748,081	32,787	33,481
Turned plates	—	—	1,497,906	1,500,992	78,217	82,848
Wire	9,190	11,433	195,034	240,339	13,785	17,184
Total in 12 months.	—	—	20,838,066	22,994,671	2,086,728	2,261,631

The discussion which followed the reading of the paper was particularly interesting. Mr. Davis was struck with the statement made in the paper, that from the ordinary samples of Welsh iron a good metal might be manufactured at a cost of 5s. per ton, and he would be glad to see it brought extensively into practice. With regard to the question of iron rails he thought many railway engineers were at fault; Mr. Sanderson had spoken of so many cwt. of pig-iron being required to make a ton of iron rails; but it was to be remarked that a very large quantity of rails were made from that which could scarcely be called iron. Railway tyres were ordered to be of the best quality iron; but when they came to rails, which he considered to be the most important element in the construction of a railway, a specification was given, based upon theory, as to how the rails that they would be more largely benefited by buying cheap iron of us than by attempting to manufacture it themselves; and we ought not to neglect the opportunity of impressing upon the French people that they had to pay an extra price for their spoils, ploughs, and other implements of husbandry, in order to support a monopoly amongst the ironmasters of their own country.

The question as to the superiority of hot and cold blast iron was referred to by Mr. Glynn, who appeared to entertain the opinion that much depended upon circumstances. In reply to Mr. Newton, it was explained by Mr. Sanderson, that the cost of converting ordinary pig-iron into his refined iron was 5s. per ton, and that when that iron had been made into bar, it cost about 18s. to convert it from the bar into steel; the impurities in the metal were got rid of at an expense of 5s. per ton. Referring to the allusion which had been made, as to America competing with England, Mr. Hobbs remarked that they had not sufficient unskilled labour. If they took the labourer as they found him in the mining districts, and transplanted him into America, where people could get land for 5s. an acre, and where they could build their own log cabins and be independent men, he would not work underground. This was the reason why America could not compete with England in the manufacture of iron.

It had been stated by Mr. Sanderson that 25 cwt. of pig-metal produced on an average only 20 cwt. of railway bar, which Mr. Siemens remarked was equal to a loss of 25 per cent. of iron; in the processes of puddling and reheating, in some instances the loss might probably amount to so large a percentage; but at some works with which Mr. (Siemens) was acquainted the loss in the puddling furnace did not exceed 12 or 13 per cent., and a very superior quality of iron was produced without the loss of intermediate process of refining being resorted to. In the course of the last twelve months he had been engaged upon experiments in the manufacture of iron and steel, and had practically succeeded in reducing the loss sustained in the puddling furnace to 5 per cent.,

TENDERS FOR COAL AND TIMBER.—TENDERS may be forwarded to me, on or before the 31st inst., for SUPPLYING 2000 tons (more or less, as may be required) of WELSH COAL of the best quality, for steam-engines, and starting from what pits, to be delivered between Midsummer, 1858, and Midsummer, 1859, at West Cardon, Gonnema, Craddock Moor, Wheel Ludcot, Wheel Pollard, and any other mines situated within six miles of Liskeard which I am purser, in about equal quantities monthly, and so that the mines shall be kept constantly supplied, in default of which, and also of the quality being the best, the cost above the contract price of obtaining a supply elsewhere is to be charged to the contractors. The mode of payment to be by acceptance at three months from the time (once in two months) of auditing the accounts. In accepting the tenders, respect will be had to quality as much as to price.

TENDERS may also be forwarded to me, on or before the 31st inst., for SUPPLYING the above mines, for twelve months from Midsummer next, with NORWAY TIMBER, of good quality and average lengths, to be delivered at the respective mines in such quantities as may be required, and when required, and to be charged at the measurement on which the duty has been paid.

Should the agents not approve of the quality of any timber sent in, the contractors to remove the same, and, at the option of the respective adventurers, either replace it by an article of approved quality, or submit to a reduction from their bills of the amount of difference between the contract price and that at which the adventurers may obtain a supply from some other party; also, the amount of the like difference to be deducted from the contractors' bills in respect of timber purchased elsewhere, in consequence of the contractors not sending in supplies when and as required.

Any mine or mines may be tendered for separately either for coal or timber.

Liskeard, 15th of 5th month (May), 1858. EDWARD A. CROUCH.

SOUTH TYNE COLLIERY COMPANY (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of this company will be held at the company's office, 61, Moorgate-street, London, on Saturday, the 5th of June next, at Twelve o'clock precisely, when the report and accounts for the year will be submitted. One director retires out of office by rotation, and who is eligible for re-election. By order of the Board, HIRAM WILLIAMS, Sec.

Dated May 20, 1858.

DALE MINING COMPANY (LIMITED).—Notice is hereby given, that the QUARTERLY GENERAL MEETING of the shareholders in this company will be held at the London Tavern, Bishopsgate-street, in the City of London, on Friday, the 28th inst., at Two o'clock. The Transfer-books will be closed from the 15th until after the meeting. By order of the Board, J. DICKINSON BRUNTON, Sec.

POLTIMORE COPPER AND GOLD MINING COMPANY.—Notice is hereby given, that the sum of FOURPENCE THREE-FARTHS per share, returnable upon delivery of the scrip, CAN BE HAD, on or after the 24th inst., at the offices of Jno. R. MILLETT, Esq., solicitor, 1, King's Arms-yard, Moorgate-street, between the hours of One and Three P.M. London, May 19, 1858. By order, HENRY C. CROFT, Sec.

SOUTH CROFTY MINE.—LETTERS, &c., TO THE PURSER, WITH TRANSFER OF SHARES, and on the general business of the mine, TO BE ADDRESSED TO THE PURSER, SOUTH CROFTY MINE, TUCKINGMILL, TRURO, and not to Penzance.

WHEAL PENHALE SILVER-LEAD SETTS, IN THE PARISH OF ST. BREOCK, CORNWALL. Now to be granted for 21 years, at 1-15th dms. One sett contains the Wheal Penhale Mine, which has returned £6000 worth of ore at a depth of 30 fms. only. The adjoining sett in the same estate contains a highly promising lode, parallel to the principal one in the old mine. All further information may be obtained from the owner of the estate, Mr. HART NICKELL, Penhale, near Wadebridge, Cornwall.

NORTH WHEAL ALFRED COPPER AND LEAD MINING COMPANY, HAYLE, CORNWALL.

Divided into 1024 shares.—Conducted on the "COST-BOOK SYSTEM." BANKERS.—Messrs. Vivian, Grylls, Kendall, and Co., Union Bank, Helston. PURSER AND MANAGER.—Richard Dalton, Esq., Helston. UNDERGROUND MANAGER.—Capt. J. B. Wilkin, Wexford. This company has been formed to work these extensive setts, situated near Hayle, held for a term of 21 years, at a royalty of 1-20th. The district is highly mineralised, and comprises Wheal Alfred Consols, Great Alfred, and other celebrated mines. Two-thirds of the shares are taken; applications for any of the remaining shares may be made by persons of undoubted respectability to the London agent, D. G. GOATLEY, 31, Threadneedle-street, E.C.

THE NIDDERDALE LEAD MINING COMPANY (LIMITED). Capital £20,000, in 20,000 shares of £1 each; 2s. 6d. per share to be paid on allotment.—Future calls not to exceed 1s. 6d. per share. BANKERS.—The Yorkshire Banking Company, Ripon. Projected to take up and work extensive and VALUABLE MINES and MINERAL GROUND near PATELEY BRIDGE, containing LEAD ORE and BARYTES. Parties holding 50 shares to be eligible for directors. Early dividends may be expected, veins of rich ore having been already cut in the day level. For prospectus and reports of mining agents, with an explanatory plan and section of the ground and workings, apply, with two stamps, to Mr. THOMAS STOKES, solicitor, Castletown, near Northampton, and at Pateley Bridge, Yorkshire. N.B. Applications for shares are to be sent in to the solicitor of the company, on or before Tuesday, the 1st June, 1858.

MILLTOWN SILVER-LEAD MINING COMPANY, TULLA, COUNTY CLARE, IRELAND (LIMITED). Capital £15,000, in 3000 shares of £5 each.—Deposit, 1s. per share on allotment. First call, £1 per share. This company has been formed for the purpose of efficiently working the Milltown Silver-Lead Mine, in the county of Clare.

The lode is composed of spar, blende, mende, quartz, and lime rock, intermixed throughout with good branches of silver-lead ore, worth about £20 per ton. The blende is worth £3 10s. per ton. Large deposits of ore have been found in the same strata, and carbonate of lime in large quantities lies at the surface, suitable for burning. The opinions of three eminent practical men—viz., Capt. King, Mr. Lisahé, and Capt. Paul, of the Gogin Mine, Wales—have been obtained, who concur in the belief that the indications of the highly argentiferous ore (containing 38 ozs. of silver to the ton of lead) which this mine presents, call for such a full and proper development as can best be effected by a company with adequate capital, and hold out prospects of largely remunerative profit.

Up to a very recent period the Milltown Mine has been in the possession of an English gentleman, who, residing at a distance from the scene of operations, has been unable to bestow that constant personal supervision which is so essential to the efficient working of a mine. The directors have purchased it for the sum of £1500, and hope to be enabled to commence mining operations at once, and are convinced that the most prosperous results may fairly be anticipated. A large number of shares are already taken. Applications for shares, prospectuses, and further information, to be made to the secretary, at the offices of the company, 8 and 9, Dame-street, Dublin.

NOTICE TO THE MINING PUBLIC. **THE GREAT CARADON COPPER MINE.** PARISH OF ST. IVE, CORNWALL. In 4096 shares.—Conducted on the "COST-BOOK SYSTEM." SECRETARY—Henry Gould Sharp, 32, Poultry, London, E.C.

REPORT OF THE GREAT CARADON COPPER MINE. BY GEORGE HENWOOD, M.E., OF LEEDS. May 1.—Yesterday, at the request of, and in company with, Capt. J. Penrose, I went over this mine, which I found to be as elegantly situated as it is possibly a mine can be—at the eastern edge of the great granite range, known as the Caradon Hills, and to be literally surrounded by mines on every side: the sett abounds in lodes, several of which have been proved by extensive costaining, and found productive of very rich copper ore, of the same character as that found in the South and West Caradon and Tokenbury Mines, the east of which the Great Caradon lies in immediate contiguity, and in a direct line of the general strike of their main lode; on the north is the Marke Valley and Phoenix Mines; on the south is the Great Caradon and Slade, the Mary Ann, Trellawny, and other mines; on the east is the Penhazet Lead Mine and the series known as the Kit Hill district—Kelly Bray, Holmbush, and the Rednor Mines. The sett is also traversed by cross-courses and veins, one of which, near the present workings, is likely an elvan for making ore as ever I saw in any mine; indeed, the sett possesses all the peculiar features deemed necessary by miners to constitute a great mine. Works are now being erected for sinking an engine-shaft, on which a capital whim, with horse-engine appliances attached, are nearly completed, so soon as this is the case, sinking will be recommenced. The necessary pumps, windlasses, &c., are on the ground, and will be placed in position forthwith. Everything appears to be carried out in the most workmanship and economical manner. A storehouse and smith's shop has been erected without needless expense, and it at no more cost than represented to me by the captain who accompanied me, reflects great credit on all concerned in the management. The men on the mine were working with spirit, and appeared contented—a capital sign. I shall take great interest in this property, which I am fully persuaded will be found one of the best of the many young mines ever brought out in this locality. GEORGE HENWOOD.

The above report was accompanied with the following letter:—
Callington, May 1, 1858.—DEAR SIR: I send you the enclosed report at the request of Capt. Penrose. I verily believe you have a most valuable property; I shall not fail to say so often. I return to you, nor shall I hesitate to advise my friends to the same effect. I was underground at the South Caradon the day before, so that I am enabled to form a correct opinion of a mine so closely resembling it, and in immediate contiguity. The South Caradon never looked better. GEORGE HENWOOD.
Henry Gould Sharp, Esq.,
P.S. For shares, apply to HENRY GOULD SHARP, 32, Poultry, London, E.C.

THE GENERAL AUCTION COMPANY (LIMITED).—This company calls the attention of Engineers, Architects, Contractors, Builders, Manufacturers, and others, to the FACILITIES THEY POSSESS for the PUBLIC or PRIVATE SALE OF ENGINEERING PLANT of every description, BUILDING MATERIALS, LATHS, &c.—Further particulars to be obtained of the MANAGER, at the offices, 23, New Bridge-street, Blackfriars, E.C.

THE GENERAL AUCTION COMPANY (LIMITED).—The Directors are prepared to receive APPLICATIONS FOR ADVANCES ON ALL DESCRIPTIONS OF PROPERTY INTENDED FOR SALE. Offices, 23, New Bridge-street, Blackfriars, E.C.

MORTGAGE.—THE GENERAL AUCTION COMPANY (LIMITED). are instructed to INVEST various SUMS OF MONEY by way of MORTGAGE, from £500 upwards, at this rate, &c. Offices, 23, New Bridge-street, Blackfriars, E.C.

UNITED STATES OF AMERICA.—DUPEE, BECK, and SAYLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and SALE OF STATE, CITY, and RAILROAD SECURITIES, MANUFACTURING, and BANK SHARES, give particular attention to the MINING COMPANIES OF LAKE SUPERIOR, and furnish reliable information concerning them.
[DUPEE, BECK, and SAYLES refer to the Editor of the Mining Journal.]

THE MINING JOURNAL.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

In the Cause of VAWDREY v. BURTON AND WIFE.

IN RE STRAY PARK MINE.

NOTICE IS HEREBY GIVEN, that, pursuant to an ORDER, or

DECREE, made in the above-mentioned Cause, and bearing date the 31st day of March last, a PUBLIC AUCTION will be HELDEN at the Registrar's Office, Truro, on

Wednesday, the 24th day of June next, at Twelve o'clock at noon, for SELLING FOUR

(920ths) PARTS, or SHARES, of the Defendant Thomas Jones Burton, of and in the said

MINE, or as many of the said several shares of the said Defendant Thomas Jones Burton

as may be necessary to satisfy the said Order, or Decree, and of and in the ORES, HAL-

VANS, ENGINES, MACHINERY, MATERIALS, and OTHER EFFECTS, upon and

belonging to the said MINE.

For further information, application may be made to Messrs. HODGE and HOCKIN,

plaintiffs' solicitors, Truro.—Dated Registrar's Office, Truro, May 18, 1858.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

In the Cause of VAWDREY v. BURTON AND WIFE.

IN RE CAMBORNE VEAN, and WHEAL FRANCIS UNITED MINES.

NOTICE IS HEREBY GIVEN, that, pursuant to an ORDER, or

DECREE, made in the above-mentioned Cause, and bearing date the 31st day of March last, a PUBLIC AUCTION will be HELDEN at the Registrar's Office, Truro, on

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VANS, ENGINES, MACHINERY, MATERIALS, and OTHER EFFECTS, upon and

belonging to the said MINE.

For further information, application may be made to Messrs. HODGE and HOCKIN,

plaintiffs' solicitors, Truro.—Dated Registrar's Office, Truro, May 18, 1858.

MINING MATERIALS, 30 in. cylinder PUMPING ENGINE, and STAMPS

ATTACHED, BOILER, &c., FOR SALE.

MESSRS. J. BURGESS and G. SEALY WILL SELL, BY

PUBLIC AUCTION, on Monday, the 24th day of May inst., at Eleven o'clock

in the forenoon, at BALNOON CONSOLS MINE, in the parish of Uny Lelant, the

WHOLE of the excellent and valuable MINING MATERIALS:—viz., a 30 in. cylinder

STEAM PUMPING ENGINE, 9 ft. stroke in the cylinder, and 8 ft. stroke in the shaft,

with stamps attached, consisting of auxiliary beam, iron axle to lift 24 heads, fly-wheel,

sweep rod, cranks, &c., 9 tons boiler, balance-beam, capstan and shears.

About 70 fms. 6 in. pumps.

About 15 fms. 9 in. long.

18 in. plunger-pole, 10 ft. long.

17 in. plunger-pole, 10 ft. long.

15 in. plunger-pole, 10 ft. long.

(With pole-eyes to match.)

35 in. working-barrels, 10 ft. long.

19 in. working-barrel, 10 ft. long.

19 in. windrose, 9 ft. long.

36 in. windrose, 7 ft. long.

36 in. do. do.

18 in. do. do.

Stuffing-box and glands.

6 in. H-pipe, 4 ft. long.

Capstan-rope.

15 cwt. whin-chain.

50 fms. main rod, 6 in. square, with strap-

pling-pieces, &c., complete.

Balance-bob.

150 fms. flat rods and stands.

Bob and stand.

40 fms. whin-chain.

100 fms. ladders.

2 horse whims.

4 horse kibbles.

Shaft tackle and whin.

55 fms. air-pipes.

3 stamps, frames, cofers, &c.

Stamps, floors, roofing, tin knives, several barrows, one 40 in. smith's bellows, anvil and

vice, screw stocks and tools, shaft rollers, smith's tools, sundry old and new iron, 500

bricks, currier's bench, a quantity of old and new timber, miners' chest, &c. Also, the

account-house furniture, consisting of tables, forms, chairs, dinner sets, glasses, jugs, &c.

Refreshments will be provided on the day of sale.

All persons having claims on Balnoon Consols Mine are requested to send particulars

of the same forthwith to Messrs. ROSCOLE and DAVIES, solicitors, Penzance.

SORTIDGE AND BEDFORD MINE, NEAR TAVISTOCK.

MACHINERY AND MATERIALS FOR SALE, BY PUBLIC AUCTION.

MR. HENRY WILLS is instructed to SELL, BY PUBLIC

AUCTION, on Wednesday, the 26th May, 1858, on the MINE, the WHOLE of the

MACHINERY, &c., of SORTIDGE AND BEDFORD CONSOLS MINE, com-

prising a large and powerful WATER-WHEEL, nearly new, and in good condition, 30 ft.

diameter, 6 ft. breast, cast-iron axle, gudgeons, sockets and segments, gun-metal bear-

ings, crank for pumping, drawing machine, complete.

117 fms. 14 in. rods.

26 pulleys, stands, and brackets, with brass

bearings.

30 pulleys, stands, and brackets.

160 fms. 7 in. machine-rope.

70 fms. 7 in. capstan-rope.

Capstan, shears, poppet head, and pulleys.

Shaft, longerhead, and balance-bobs, nearly

21 8 in. pumps.

37 in. working-barrels.

37 in. doors and do. do.

27 in. windrose.

76 in. pumps; 8 fms. 5 in. ditto.

Machine house, 30 ft. long.

70 fms. 14 in. bucket rods.

Machine and windrose kibbles.

Large double and treble iron blocks.

Crib winch.

Refreshments will be ready at Twelve, and the sale will commence at One o'clock.

17½, George-street, Plymouth, May 17, 1858.

FREEHOLD ESTATE, MINES, COLLIERY, and BUILDING LAND.

GREAT BRIDGE, WEST BIRMINGHAM, COUNTY OF STAFFORD.

MESSRS. E. AND C. ROBINS WILL SELL, BY AUCTION,

on Wednesday, the 24th day of June, 1858, at the Swan Hotel, Wolverhampton, at

Four o'clock in the afternoon, subject to conditions to be then produced, a FREEHOLD

ESTATE, being the remaining part of the estate of the late Mr. Edward Elwell, contain-

ing altogether about 40 acres, situated at Great Bridge, West Birmingham, on the Dudley

turnpike-road, and on the line of the Great Bridge Branch of the Birmingham, Wolver-

hampton, and Dudley Railway, and having the advantage of both the upper and the lower

levels of the Birmingham Canal.

About 25 acres of the surface land have been sold, reserving the mines and minerals;

and there remain about 15 acres of surface land well adapted for building purposes, with

proper openings for streets, and every convenience for working the mines. Therefore,

it is intended to be sold comprises—

TWO UNDIVIDED FOURTH PARTS of the ungoten MINES under the canal,

and railway, and in and under the remaining 15 acres of surface land, and in

under the parts of the surface land sold (excepting the Close called the

Foundry Field, and the Ironfoundry and buildings thereon), containing about

38 a.

The ENTIRETY of the remaining MINES and MINERALS (except clay and

sand) under the Close called the Foundry Field, and the Ironfoundry and build-

ings, and under the canal, containing about 7 a.

The ENTIRETY of the FREEHOLD BUILDING and SURFACE LAND, on

which are sunk three pairs of pit shafts, containing about 15 a.

In recent dealings with this estate, care has been taken to secure proper openings for

the several streets, and also every facility for conveying the mines and minerals to market.

For further particulars, apply to Mr. J. H. HURSTFIELD, solicitor, Wednesday; Messrs.

ISGROVE, WILKINS, and WILKINS, solicitors, Birmingham; Mr. T. J. TAYLOR, solicitor, Lin-

coln's Inn-fields, London; or E. and C. ROBINS, surveyors and auctioneers, Birmingham.

VALUABLE FREEHOLD COLLIERY AND IRONWORKS, and 750 acres of very

superior FREEHOLD LAND, divided into farms in a ring fence, in CARMARTHEN-

SHIRE, SOUTH WALES.

MESSRS. FULLER and HORSLEY are instructed to SELL, BY

AUCTION, at the Mart, London, on Wednesday, the 24th June, at Twelve, the

TRIMARAN COLLIERY and IRONWORKS, with SURFACE LANDS of about

750 acres, a highly important freehold property, well deserving the attention of capitalists.

Trimaran is situated in the parish of Penybry, in the county of Carmarthen, three miles

from the Kidwelly station of the South Wales Railway, and five miles from Barry Port,

a large floating dock, which will admit vessels of 1000 tons register, the entrance at the

dock gates being 45 ft., with 15 ft. of water at neap tides. There is a communication by

canal between the collieries and the port. The surface lands occupy an area of about 750

acres, of which about 40 acres are appropriated to the works, about 120 acres of CULTI-

LAND, and the remainder MEADOW and ARABLE LAND, in a fair state of cultivation,

let to different tenants, and realising a rental of between £500 and £600 per annum,

which by a small outlay and good farming might be nearly doubled.

The MINERALS extend under the entire surface, and comprise ANTHRACITE COAL,

IRON ORE, and FIRE-CLAY. The Ordnance Geological Survey reports that "there is a

greater thickness of coal on Trimaran than on any other anthracite property in the

district, of about 20 ft. of the surface, of the aggregate thickness of

57 ft., the principal seam, known as the Big Vein, being 9 ft. in thickness. The iron-

stone accompanies the coal, lying between the seams, with an aggregate thickness of

102 in., a mixture of which yielded on analysis upwards of 30 per cent. of iron. A course

of blackband 22 inches in thickness runs through the property. The collieries have been

opened, and iron-works and a fire-brick establishment have been constructed. The mining

works comprise adit levels or tunnels, pits, and shafts, with various steam and hydraulic

engines for pumping water and raising the minerals.

The iron-works are of more recent date, and of a superior description, comprising two

well-built furnaces, capable of producing 100 tons of pig-iron weekly, with the requisite

blast-furnaces. A costly 84-in. cylinder blast engine, erected in 1846, by the North

Albany Company, with four boilers, spacious casting-house, 74 ft. long by 30 ft. wide, with

ORIENTAL INLAND STEAM COMPANY (LIMITED), FOR NAVIGATING THE RIVERS OF INDIA.

Under authority from the Honourable East India Company, being the only company for navigating any part of any of the Indian rivers which possesses this advantage. The directors, who frequently pressed to publish the reports of the steam navigation of the river, have now published the first of a series of reports, which will, it is believed, be of great service to the public. The reports are published in the form of a series of questions and answers, and are intended to show the progress of the steam navigation of the river, and the advantages which it offers to the public. The reports are published in the form of a series of questions and answers, and are intended to show the progress of the steam navigation of the river, and the advantages which it offers to the public.

Mr. DEAR SIR, I send you the report of the directors of the Oriental Inland Steam Company (Limited) to Capt. W. H. Hall, R.N., C.B., F.R.S., &c. (late of the *Nemesis*), one of the directors. The report is published in the form of a series of questions and answers, and is intended to show the progress of the steam navigation of the river, and the advantages which it offers to the public.

At the half-yearly meeting of the Oriental Inland Steam Company, held in London, on the 15th inst., the report of the directors having been read and adopted, the following resolutions were passed:—
1. That a dividend of 10 per cent. be declared for the half-year ending on the 31st inst.
2. That the directors be and they are authorized to pay the dividend of 10 per cent. to the shareholders in cash, or in the form of shares, or in any other mode, as they may think fit.

It is explained in the report that the paid-up shares are rendered available for disposition free among the shareholders, from the gradual extension of the company's fleet having been delayed out of revenue, and not out of capital; so that, notwithstanding the large dividends, the stock had come to be much more valuable than the original capital represented.

The following extracts are taken from a leading article in the *Friend of India* newspaper, published in Calcutta, February, 1858:—

"There are facts widely known about our river communication which, reported of any continental river, would throw London into a fever of speculation. One of our steam companies, for instance, threatens to declare a dividend at the rate of 50 per cent. Large profits, moreover, in India are not temporary. There is not the smallest danger of over-doing the market. As for the eastern rivers, they are practically untapped. We venture to say that any large shipowner who would send out ten of the proper steamers, would find that they would pay him in three years, wear and tear included. We are told that there is a great railway competition, but it can scarcely be entertained by those who know the country, and there are plenty of rivers with no railway by their side."

Prospectuses, copies of reports, and all further information, may be obtained at the company's offices, 9, Billiter-street, London. By order of the Board, JOHN MATHEWSON, Sec.

ORIENTAL INLAND STEAM COMPANY (LIMITED), FOR NAVIGATING THE RIVERS OF INDIA (under subsidy from the Hon. East India Company).

The Directors give notice that, their first vessels having now been successfully completed, they are about to ALLOT THE REMAINING SHARES (£10 each), respecting which full particulars may be obtained at the company's offices.

All experience shows that the navigation of the rivers of India by steam is one of the soundest and most profitable enterprises of the day; the profits realised by existing companies varying from 30 to 40 per cent., and gradually increasing. The company has the further advantage of a yearly subsidy from the Hon. East India Company, being the only company thus distinguished, and of all such facilities in fuel and otherwise as the Government can afford.

The new allotment will take place on the 26th of May inst., after which no further applications can be received. By order, JOHN MATHEWSON, Sec. 9, Billiter-street, London, May 13, 1858.

INDIA.—PEACE AND WAR.— TWO CHROMO-LITHOGRAPHS, showing the MODE OF NAVIGATING THE INDIAN RIVERS AND INLAND BY THE STEAM TANKS OF THE ORIENTAL INLAND STEAM COMPANY. Each train, consisting of all six vessels, is about 100 ft. longer than the *Leviathan*, and, by means of such trains, troops and stores can be transported with expedition upon shallow rivers, and large quantities of merchandise can be carried with profit at a low freight, and on a small draught of water. Price 10s. per pair. London: Day and Son, Lithographers to the Queen.

PRIZE SUBJECTS FOR SESSION 1858-59. THE ROYAL SCOTTISH SOCIETY OF ARTS proposes to AWARD PRIZES of different values, of Thirty Sovereigns and under, in Gold or Silver Medals, Silver Plate, or Money, for APPROVED COMMUNICATIONS, primarily submitted to the Society, relative to INVENTIONS, DISCOVERIES, and IMPROVEMENTS in the MECHANICAL and CHEMICAL ARTS in general, and in their relation to the FINE ARTS, and also to means by which the NATURAL PRODUCTIONS of the country may be made more available. The Society suggest the following as a few of the many subjects that may be attended to, viz.:

- I. INVENTIONS, DISCOVERIES, or IMPROVEMENTS in the USEFUL ARTS.
- II. EXPERIMENTS applicable to the USEFUL ARTS.
- III. COMMUNICATIONS of PROCESSES in the USEFUL ARTS practised in this or other countries, but not generally known.
- IV. PRACTICAL DETAILS of PUBLIC or OTHER UNDERTAKINGS of NATIONAL IMPORTANCE, already executed, but not previously published; or valuable suggestions for originating such undertakings.

KEITH PRIZE (valuing Thirty Sovereigns).—For some important "Invention, Improvement, or Discovery in the Useful Arts," which shall be primarily submitted to the Society during the session.

REID AND AULD PRIZE.—For the First, Second, and Third best Models of "Anything New in the Art of Clock and Watch Making, by Journeymen or Master Watch and Clock Makers; if these should be considered worthy of prizes, the year's interest of the Reid and Auld Prize, being about Seven Guineas, divided among them in such proportions as the Prize Committee shall fix, according to merit. To such as may deserve it, the Society may add to the amount of the prize out of its general funds.

GENERAL OBSERVATIONS AND DIRECTIONS FOR PREPARING AND LODGING COMMUNICATIONS.

Communications lodged in competitions for prizes shall not have been patented, nor have been previously published, nor read before any other society. Patented articles may, however, be exhibited and described.

The descriptions of the various inventions, &c., must be full and distinct; be legibly written on foolscap paper, leaving margins at least 1½ in. broad, on both sides of each page, so as to allow of their being bound up in volumes; and, when necessary, be accompanied by specimens, drawings, or models. All drawings to be on imperial drawing paper, unless a larger sheet be requisite. The drawings to be in bold lines, not less than a quarter of an inch thick, or strongly coloured, so as to be easily seen at about the distance of 30 ft. when hung up in the hall, and the letters or figures of reference to be at least 1½ in. long. When necessary, smaller and more minutely detailed drawings should accompany the larger ones, for the use of the committees, having the same letters of reference.

The Society shall be at liberty to publish in their Transactions copies or abstracts of all papers submitted to them. All models, drawings, &c., for which prizes shall be given, to be held to be the property of the Society; the value of the model, &c., being separately allowed for.

Communications, models, &c., are to be addressed to the secretary, Chambers, 5 Hill-street, Edinburgh, postage paid; and they are expected to be lodged on or before Nov. 1, 1858, in order to ensure their being read and reported on during the session (the ordinary meetings of which commence in November, 1858, and end in April, 1859), but those which cannot be lodged earlier will be received to April 1, 1859; those lodged after that date may not be read or reported on till the following session.

For a detailed list of suggested prize subjects, application may be made to the secretary. By order of the Society, JOHN BEATSON BELL, Sec. Edinburgh, May 13, 1858.

GEOLOGICAL MAP OF THE TAVISTOCK MINING DISTRICT; to be published in the best style of Chromo-Lithography. The MAP to comprise the ENTIRE SERIES of MINES, with their BOUNDARIES, between the TAMAR RIVER and the LYDFORD, supposed to extend 12 square miles. This work has long been required by the public, and will be carried out with the skill and ability experience only can command. The scale is proposed to be 12 chains to the inch; the size of the map will, therefore, be convenient.

The copies will be delivered in the order of subscription, at One Guinea each. Subscribers, therefore, if desirous of obtaining early impressions, will oblige the publisher by forwarding their names.

Attested copies may be secured by a post-office order for 5s. at the time of subscribing, and the remaining 10s. per copy to be paid at the time of delivery. Subscriptions received by Mr. CHARLES WILLIAMS, Tavistock, Devon, the publisher; or at the Mining Journal office, 26, Fleet-street, London.

PROCEEDINGS OF THE SOUTH WALES INSTITUTE OF ENGINEERS FOR JANUARY.

Containing the President's Inaugural Address; on the Manufacture of Tin-Plates, by Mr. E. Rogers; on Blast Furnaces, by Mr. Farry. London: Mining Journal office, 26, Fleet-street; and may be had of all booksellers.

NEW GUIDE TO THE IRON TRADE; OR, MILL MANAGERS AND STOCK TAKERS' ASSISTANT.

Comprising a Series of New and Comprehensive Tables, practically arranged, to show at one view the Weight of Iron required to produce Boiler-Plates, Sheet-Iron, and Flat-Square, and Round Bars, as well as Hoop or Strip Iron, of any dimensions. To which is added, a variety of Tables for the convenience of Merchants. By JAMES ROSE, Bateman's Hill Ironworks, Bradley, near Bliton. London: Mining Journal office, 26, Fleet-street; and sold by all booksellers.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.

MIDLAND WORKS, BIRMINGHAM. BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.

IN STOCK—FOR SALE OR HIRE.

THE RAILWAY CARRIAGE COMPANY.

OLDURY, NEAR BIRMINGHAM. MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.

NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE.

LONDON OFFICES.—34, GREAT GEORGE STREET, WESTMINSTER.

THE PERMANENT WAY COMPANY GRANT LICENSES

for the USE of IMPORTANT PATENTED INVENTIONS (now adopted by numerous railways of home and abroad, to the extent of upwards of 10,000 miles), by the following patentees:—

Adams, W. B. Boucherie, Dr. H. May, Charles. Ashcroft, P. Bridgewater, H. Moate, C. R. Barlow, P. W. Bruff, P. S. Pole, William. Barlow, W. H. Doull, A. Macdonnell, J. J. Richardson, R. Birmingham, W. Macdonnell, J. J. Samuel, James. Berque, C. de. Macdonnell, J. J. With, C. H. Billings, J. E. Mansell, H. C. Woodhouse, W. H.

Every information as to description, cost, &c., of the various plans may be obtained on application to the secretary.

26, Great George-street, Westminster.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS

RAILWAY WAGONS FOR HIRE. Apply to the SECRETARY, 3, Newhall-street, Birmingham.

JOHN ROGERSON AND CO., NEWCASTLE-ON-TYNE, AND

MIDDLESBROUGH-ON-TEES. PIG, BAR, PLATE IRON, CHAINS, ANCHORS, FORGINGS, GIRDERS, PIPES, FOUNDRY WORK.

LONGRIDGE'S WEST HARTLEY STEAM COALS (on the Admiralty List). COKING, GAS, HOUSE, AND SMITHS' COALS, COKE, FIRE-BRICKS, &c.

JOHN H. PECK, MANUFACTURER OF RAILWAY OIL

COVERS, CART AND WAGON COVERS, OIL CLOTH, STACK COVERS, BOAT SHEETS, TARPULIN, BRATTICE CLOTH, COKE AND CORN SACKS, POTATO BAGS, TWINE, &c., WIGAN.

LONDON AGENT.—T. E. WELLER, 15, Duke-street, Adelphi.

RICHARDSON AND CO., ENGINEERS AND IRONFOUNDERS,

TUNNEL FOUNDRY AND SPRING GARDEN IRONWORKS, DUDLEY, NEAR BIRMINGHAM.

MANUFACTURERS OF GAS AND WATER APPARATUS, STEAM-ENGINE BOILERS, SINGLE AND DOUBLE CLASS HOLDERS, TANKS, BRIDGES, BOATS, ROOFS, VALVES, &c.

GAS WORKS ERECTED FOR MINES, PUBLIC BUILDINGS, TOWNS, &c.

ROBERT MUSSET'S CAST-STEEL.

TO CONTINENTAL AND FOREIGN GOVERNMENTS, AND CAPITALISTS.

ROBERT MUSSET, of COLEFORD, GLOUCESTERSHIRE, having INVENTED and PERFECTED, on the scale of manufacture, SEVERAL METHODS for the PRODUCTION of the BEST CAST-STEEL, at a cost far lower than has heretofore been accomplished, and from such materials as are cheap, abundant, and accessible in almost all countries, and now OFFERS these UNPATENTED PROCESSES FOR SALE, upon terms hereafter to be arranged with such parties as may be disposed to treat for them.

The processes are as under:—
1. THE MANUFACTURE OF CAST-STEEL direct from the ORE, at a prime cost of £12 per ton in the ingot, and of first-rate quality.

2. THE MANUFACTURE OF CAST-STEEL direct from DEOXYDIZED IRON ORES, at a cost of from £12 to £15 per ton of ingots. The quality of this steel, when made from ore carefully selected, is far superior to that at present manufactured from the expensive bar-iron of Sweden and Russia.

3. THE MANUFACTURE OF CAST-STEEL from ANY KIND OF BAR-IRON, STEEL, or SCRAP IRON, whether COKE or CHARCOAL IRON, so that a first-rate quality is obtained from ordinary charcoal iron, and good serviceable cast-steel is prepared from the cheapest scrap or bar-iron, at a cost of from £12 to £15 per ton.

4. THE MANUFACTURE OF CAST-STEEL from PIG-IRON and IRON ORE, so as to ensure the production of good cast-steel from coke pig-iron of average quality, and first-rate cast-steel from charcoal pig-iron, at one melting, and without injury to the melting-pots, for £10 to £15 per ton.

Parties who may be disposed to treat for any of these inventions, and who agree upon the terms which may be proposed, will also, if they require it, be taught and fully instructed in the routine for producing cast-steel upon the scale of manufacture, namely, the construction of the furnaces, pot mixtures, method of making the pots, managing them, &c., heating and drawing out of the ingots, &c.; and they may have their own workmen fully instructed in such routine.

In all the foregoing processes there is no departure required from the ordinary system of melting cast-steel, as now practised in Sheffield and elsewhere.

Parties desiring proofs may bring their own materials to be melted into steel, in order to be convinced that the advertiser has advanced nothing but what he can carry out to the fullest extent.

N.B. The processes here offered are wholly independent of those submitted to the Ebbw Vale Iron Company by the advertiser.

References.—Messrs. BROMAGE, SNEAD, and GOSLING, Bankers, Monmouth. THOMAS GRATEX, Esq., Banker, Newport, Monmouthshire.

SHORTRIDGE, HOWELL, and JESSOP, HARTFORD STEEL

WORKS, SHEFFIELD, SOLE MANUFACTURERS OF HOWELL'S PATENT HOMOGENEOUS BOILER-PLATE METAL, combining the strength and durability of steel with the malleability of copper; warranted to bear double the pressure of the best boiler-plate iron; RIVETS, ANGLES, and STAYS of the same material. Also, RUSSELL and HOWELL'S PATENT CAST-STEEL TUBES, for multitubular boilers, shafting, railway axles, &c.

Application to be made to SHORTRIDGE, HOWELL, and JESSOP, Hartford Steel Works, Sheffield; and Messrs. HARVEY and Co., 12, Haymarket, London.

CALVERT'S PATENT PROCESS FOR MAKING COKE AND

IRON FREE FROM SULPHUR.

For LICENSES to USE the above process, apply to ROBERT LONGDOX, Jun., 63, King-street, Manchester.

For APPLICATION of the PATENT to GAS WORKS, apply to Mr. GEORGE TRICKETT, Exchange Chambers, Manchester.

MESSRS. R. & J. COUPE, ENGINEERS and IRONFOUNDERS,

MANUFACTURERS OF HORIZONTAL HIGH-PRESSURE STEAM-ENGINES, from 10 to 200-horse power; the largest description of engines mounted with improved ROLLING MILL PISTON VALVE, which has proved itself so eminently adapted for winding and other engines.

Clayton Foundry, Wigan.

CONDIE'S PATENT STEAM HAMMERS.—

FIRST-CLASS STEAM HAMMERS, from 10 cwt. to 7 tons, suitable for jobbing forges, puddling forges, and the smith's shop of engineers, ship-builders, wagon builders, agricultural implement makers, railway and steam navigation companies, &c.—Govan Bar Ironworks, Glasgow.

JOHN CONDIE.

CAMBRIAN FOUNDRY, ABERYSTWYTH, CARDIGANSHIRE.

ON SALE, an excellent NEW 36 in. CRUSHER, complete; also, a 30 in. CRUSHER, nearly complete; and several LIFTS OF PUMPS.

N.B. All kinds of CASTINGS, SMITHS' and BRASS WORK MADE, for mining and other purposes, on the shortest notice, and at reasonable charges. STEEL, BAR-IRON, CHAIN, and OTHER MATERIALS.

SCREW, BOLT, and BOILER MADE.

Plans and estimates forwarded, on application, for water-wheels, steam-engines, &c.—Address, GEO. GREEN, Cambrian Foundry, Aberystwyth.

SPECIAL NOTICE.—ANTHRACITE COAL, MINERAL, AND

OTHER PROPERTY.

TO CAPITALISTS, IRONMASTERS, AND OTHERS.—A valuable FREEHOLD MINERAL ESTATE, of ample magnitude, centrally situated in South Wales for railway transit and shipment, containing ANTHRACITE or STEAM COAL, BLACKBAND IRON ORE, IRONSTONE, FIRE and OTHER CLAYS, PAVING, BUILDING, GRINDING, FLAGS, SILLS, and OTHER STONE, with adequate water-power and timber. The PROPRIETOR is prepared to DISPOSE OF ONE UNDIVIDED SIXTH PART, or SHARE, upon most advantageous terms to a purchaser, but with the avowed view of his joining him in working the same, which might be done at a comparatively trifling expense. None but principals will be treated with, this announcement being strictly genuine.—Apply, pre-paid, with real name and address, to "C. V.," Post-office, Gloucester.

N.B. The minerals have been proved by levels and otherwise.

FOREST OF DEAN, GLOUCESTERSHIRE.

THE ARTHUR AND EDWARD COLLIERY, at LYDBROOK, with all the valuable PLANT and MACHINERY, and STOCK of FIRE-CLAY of immense extent.—TO BE DISPOSED OF, an extensive and important COLLIERY, lately working the celebrated High Delf Vein of Coal, extending to 180 acres, and upon which a very considerable outlay has been made in the erection of buildings, with the most complete steam-engines, plant, and machinery. The underground workings are very extensive, erected in stone, and the arrangements are most complete for working 200 tons a day, and carrying on the colliery most successfully, the small coal being much in request for patent fuel, and a most valuable stock of fire-clay on the bank.—To view, apply to Mr. SMITH, at the works; and for further particulars and terms, to Mr. HIRAM WILLIAMS, 61, Moorgate-street; or to Mr. ROBINS, Piazza, Covent-garden, London.

IRONWORKS FOR SALE.—TO BE SOLD, BY PRIVATE

CONTRACT, the BEDLINGTON IRONWORKS, situated at Bedlington, on the River Blyth, and adjoining the Blyth and Tyne Railway, with a branch. The works consist of TWO powerful ENGINES, of 110 and 100-horse power, drawing three finishing, two puddling, and one plate mills, with two squencers and shears attached. There are 30 puddling and 11 heating furnaces; also, one engine for large plate shears, with small pumping engine and donkey, and a good 25-horse power engine for working a good use forge, with two heating furnaces. The works are capable of making from 300 to 500 tons of finished iron per week.

The advantages connected with these works are their being situated in a large coal district; also, their being connected with the Blyth and Tyne Railway, where goods can be shipped either at the Haydock Docks, on the Tyne, and sent to any part of the Kingdom by rail, or at Blyth, at a very small cost, where also the raw material can be delivered ex ship. The works could be ready for immediate operation at a very small cost.

There is attached to the works a mansion-house, manager's house, offices, and several cottages; also, a first-rate dam, and a large reservoir of water, capable of driving a water-wheel of 100-horse power.

For further particulars, apply to Mr. GIBB, at the works; to Mr. JOSEPH THORNTON, Newcastle-on-Tyne; or to Messrs. LACE, MARSHALL, and GILL, solicitors, Liverpool.

ECONOMICAL MANUFACTURE OF CARBONATE OF SODA,

WASTE SULPHUR FUMES OF COKE OVENS, COPPER, IRON, ZINC, AND LEAD WORKS.

For the description, see the *Mining Journal* of the 13th March; and for particulars respecting license, &c., apply personally, or by letter (post paid), to M. MESSAGE, 28, Rue St. Paul, Paris.

VENTILATION IN COAL MINES.—BIRAM'S PATENT

ANEMOMETERS, 12 in. £4 4s.; 6 in. £3; 4 in. pocket size, £2 10s. HEDLEY'S NEW DIAL, admirably adapted for mines of a considerable dip; price £10 10s., £9, and £7 10s.

To be had of the manufacturer, JOHN DAVIS, Derby.

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THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consols (cop.), Phillack [S.E.]	£2 11 10	£2 11 10	11 1/2	£18 6 0	£20 3 0—April 5, 1858.
1624	Ballyvaden (tin), St. Just	11 5 0	4	4 5	12 5 0	0 5 0—Jan. 1, 1854.
10000	Barnstaple (copper), Devon	0 12 6	1 1/2	1 1/2	312 10 0	0 7 1/2—May 12, 1858.
4000	Bedford United (copper), Tavistock	2 6 8	6 1/2	6 1/2	9 19 0	0 2 6—March 4, 1858.
240	Boscawen (tin), St. Just	20 10 0	170	170 180	21 9 0	3 10 0—Feb. 4, 1858.
240	Boscawen (tin), St. Just	20 10 0	170	170 180	21 9 0	3 10 0—Feb. 4, 1858.
1200	Brightside and Froggatt Grove, Derbyshire	3 0 0	3 1/2	3 1/2	3 0 0	3 0 0—April 30, 1856.
100	Brynmill Hall (lead), Flintshire	25 0 0	50	50	13 0 0	3 0 0—July 31, 1856.
1000	Brynmill, Llanidloes, Montgomeryshire	7 15 0	1 1/2	1 1/2	0 5 0	0 5 0—July 1, 1856.
400	Buckland Consols (tin), Ferran	2 3 6	4 1/2	4 1/2	0 10 0	0 10 0—March 26, 1857.
6000	Bwlch (silver-lead), Cardiganshire	3 6 8	1 1/2	1 1/2	0 2 6	0 2 6—July 30, 1856.
4000	Calstock Consols (copper)	5 0 0	4 1/2	4 1/2	0 2 6	0 2 6—Dec. 25, 1857.
1000	Carn Brea (copper, tin), Illogan	15 0 0	50	49 50	241 10 0	2 0 0—May 21, 1858.
2000	Carnvorth (tin), St. Just	4 10 0	2 1/2	2 1/2	0 15 0	0 3 0—June 16, 1856.
200	Cefn Cwm Brynno (lead), Cardiganshire	33 0 0	48	48	2 5 0	2 0 0—March 26, 1857.
2000	Colwyn Colliery (copper), Lancashire	10 0 0	15	15 1/2	5 0 0	0 8 0—Dec. 2, 1857.
200	Condamore (copper, tin), Camborne [S.E.]	20 0 0	85	85 90	85 0 0	0 7 0—June 10, 1857.
1000	Craddock Moor (copper), St. Cleer	8 0 0	40	35 37 1/2	1 0 0	0 5 0—May 14, 1858.
30000	Craven Moor, Limited (lead), Yorkshire	0 10 0	40	40	0 9 0	0 9 0—Feb. 28, 1856.
128	Cwmtythwl (lead), Cardiganshire	60 0 0	200	200	125 0 0	5 0 0—May 6, 1858.
280	Derwent Mines (silver-lead), Durham	300 0 0	150	150	122 0 0	10 0 0—June 25, 1857.
4076	Devon and Cornwall (copper)	4 6 3	17	16 18	0 5 0	0 5 0—April 20, 1858.
1024	Devon Great Consols (cop.), Tavistock [S.E.]	1 0 0	475	470 480	617 0 0	8 0 0—May 21, 1858.
672	Ding Dong (tin), Gwilt	38 15 0	16	16	16 7 6 1/2	1 10 0—March 2, 1857.
179	Dolcoath (copper, tin), Camborne	237 15 0	270	260 270	953 0 0	10 0 0—April 12, 1858.
12800	Drake Walls (tin, copper), Calstock	1 19 0	1 1/2	1 1/2	0 13 6	0 2 0—Sept. 11, 1857.
300	East Daren (lead), Cardiganshire	32 0 0	115	115 120	42 0 0	3 0 0—April 15, 1858.
2048	East Falmouth (copper), Whitechurch	2 0 0	4	4	0 7 6	0 2 6—Jan. 25, 1858.
128	East Pool (tin, copper), Pool, Illogan	24 5 0	175	175	297 10 0	2 10 0—Feb. 22, 1858.
1024	East Wheel Margaret (tin, copper)	7 17 6	6	5 1/2	0 5 0	0 5 0—Jan. 17, 1854.
5700	Exmouth (silver-lead), Christow	4 14 0	6	6	3 15 0	0 2 0—April 27, 1858.
1400	Farm Mining Company (lead), Derbyshire	5 0 0	47	46	17 13 4	1 0 0—May 4, 1858.
4940	Fowey Consols (copper), Tywardreath	4 0 0	4	4 1/2	41 4 3	4 0 0—Feb. 17, 1857.
4448	General Mining Co. for Ireland (cop., lead)	4 0 0	2 1/2	2 1/2	1 0 8	0 3 3—June 5, 1853.
2000	Goginan (silver-lead), Cardiganshire	11 5 0	11	11	22 0 0	0 5 0—Sept. 5, 1850.
1024	Goumarren (copper, tin), St. Cleer	11 5 0	11	10 1/2	7 6 0	0 5 0—Dec. 1, 1857.
243	Graham and St. Aubyn (copper)	109 10 0	115	114 116	10 0 0	3 0 0—May 1, 1858.
6000	Great South Toileys [S.E.]	0 14 6	14 1/2	14 1/2	2 1 6	0 7 0—April 15, 1858.
26666	Great Wheel Vor (tin, cop.), Helston [S.E.]	8 2 6	1 1/2	1 1/2	0 5 0	0 5 0—Oct. 29, 1855.
119	Great Work (tin), Germoe	100 0 0	100	100	221 10 0	7 10 0—Feb. 27, 1857.
1024	Herodfoot (lead), near Liskeard	8 10 0	8 1/2	8 1/2	3 15 0	0 12 6—Jan. 28, 1858.
6000	Hingsdon Down Consols (copper), Calstock	3 10 0	5 1/2	5 1/2	2 16 0	0 2 6—Nov. 25, 1856.
2000	Holyford (copper), near Tiptary	11 0 0	8 1/2	8 1/2	4 2 6	0 5 0—Jan. 28, 1857.
2500	Isle of Man, Limited (lead)	25 0 0	42	42	56 17 3	1 0 0—March 18, 1858.
76	Jamaica (lead), Mold, Flintshire	3 13 6	—	—	380 0 0	5 0 0—March 10, 1851.
200	Lacey Mining Company, Isle of Man	100 0 0	1000	1000	1420 0 0	50 0 0—June 30, 1857.
160	Levant (copper, tin), St. Just	2 10 0	115	110 120	1066 0 0	5 0 0—May 18, 1858.
5000	Lewis Mines (tin, copper), St. Erth	6 11 1	2	2 1/2	0 10 0	0 10 0—Dec. 20, 1855.
400	Liskeard (lead), Cardiganshire, Wales	18 15 0	120	120	310 10 0	3 0 0—April 1, 1858.
6000	Marke Valley (copper), Carnon	4 10 6	2	2 1/2	0 5 0	0 3 0—Sept. 7, 1855.
5000	Merthyr Hills (lead), Somerset	3 15 0	1 1/2	1 1/2	1 7 6	0 5 0—May 29, 1857.
5000	Merthyr (lead), Flint	3 2 6	2 1/2	2 1/2	1 1 0	0 2 6—June 22, 1853.
1800	Miners Mines, Limited (lead), Wrexham	25 0 0	125	125	30 2 6	3 0 0—May 8, 1858.
20000	Mining Company of Ireland (cop., lead, coal)	7 0 0	17 1/2	17 1/2	13 7 9	0 12 3—Jan. 7, 1858.
5000	Nantow and Penrhyn, Limited (22 1/2 shares)	1 17 6	1 1/2	1 1/2	0 1 6	0 1 6—April 30, 1855.
6400	Nether Heath, Westmoreland	0 7 0	1	1 1/2	0 2 0	0 2 0—May 21, 1856.
470	Newtons Mining Company, Co. Down	50 0 0	35	35	51 0 0	3 0 0—Dec. 1, 1858.
200	North Pool (copper, tin), Pool	36 10 3	60	55 65	324 0 0	2 0 0—Dec. 26, 1854.
700	North Roskear (copper), Camborne	12 0 0	24 1/2	24 1/2	750 0 0	4 0 0—Sept. 26, 1853.
6000	North Wheel Bassett (cop., tin), Illogan [S.E.]	nil.	11 1/2	11 1/2	14 7 0	0 8 0—Feb. 24, 1858.
6400	Par Consols (copper), St. Blazey [S.E.]	1 2 6	20	20 1/2	31 14 0	0 10 0—March 2, 1858.
500	Peak United (lead), North Derbyshire	7 15 0	2 1/2	2 1/2	4 10 0	0 10 0—April 12, 1856.
200	Phonics (copper, tin), Linkinhorne	100 0 0	370	370	269 10 0	25 0 0—May 5, 1858.
1000	Polbarno (tin), St. Agnes (Frederick)	15 0 0	5	5	18 13 6	1 0 0—July 11, 1857.
1772	ditto ditto (old and ditto)	—	—	—	1 0 0	0 10 0—March 2, 1858.
560	Providence Mines (tin), Uay Lelant	20 13 0	66	65 67 1/2	72 4 6	2 0 0—Feb. 24, 1858.
2500	Rhoswydall and Bachelidon (lead)	11 5 0	12	12 1/2	0 13 0	0 3 0—Oct. 21, 1857.
512	Rosewarne United (copper, tin), Gwynedd	12 0 0	25	25 27 1/2	32 10 0	1 10 0—June 8, 1857.
15000	Rosewarne Colliery Company, Limited	0 5 0	0	0	0 10 0	0 6 0—Feb. 4, 1858.
12000	Rortridge Consols (cop.), Whitechurch [S.E.]	2 0 0	1 1/2	1 1/2	0 10 0	0 2 6—July 27, 1857.
256	South Canard (copper), St. Cleer [S.E.]	2 10 0	395	395 400	510 0 0	10 0 0—March 30, 1858.
128	South Crinns (copper), St. Austell	19 0 0	285	—	60 0 0	20 0 0—June 18, 1855.
512	South Toileys (copper), Redruth, Cornwall	8 0 0	70	67 1/2 70	74 0 0	3 0 0—July 28, 1857.
496	South Wheel Frances, Illogan [S.E.]	18 18 9	230	240 250	294 5 0	7 0 0—May 3, 1858.
1024	Sparrow Consols (tin), St. Just, Cornwall	3 12 0	1 1/2	1 1/2	8 8 6	0 2 6—Dec. 10, 1853.
280	Sparrow Moor (copper), St. Just	23 7 8	15	15	4 5 0	0 10 0—June 13, 1856.
870	St. Aubyn and Gwilt (cop., tin), Breage	6 8 4	4 1/2	4 1/2	0 17 6	0 4 0—April 1, 1852.
2000	St. Day United (tin and copper)	2 0 0	8	8	18 13 6	1 0 0—Feb. 23, 1858.
470	St. Ives Consols (tin), St. Ives	16 0 0	37 1/2	35 40	916 0 0	1 10 0—May 18, 1858.
5600	Tamar Consols (silver-lead), Beamanston [S.E.]	4 10 0	1 1/2	1 1/2	4 13 6	0 2 6—Feb. 7, 1856.
6000	Tinrath (copper, tin), Pool, Illogan [S.E.]	11 10 0	3 1/2	3 1/2	8 13 6	0 10 0—Feb. 18, 1858.
572	Trevelyan Consols (tin), St. Ives	11 10 0	0	0	1 15 0	1 0 0—Feb. 21, 1854.
96	Tresavean (copper), Gwynedd, Cornwall	42 10 0	60	60 65	4677 15 0	5 0 0—June 4, 1853.
120	Trevelyan (copper), Gwynedd, Cornwall	15 10 0	15	15	403 13 6	2 10 0—April 29, 1851.
4000	Trevelyan (copper, tin), Bodmin	1 3 6	1	1 1/2	0 5 0	0 5 0—July 8, 1856.
4096	Trevelyan (silver-lead), Menheniot, Cornwall	2 10 0	1	1 1/2	1 12 0	0 3 0—April 2, 1857.
100	Trumpet Consols (tin), near Helston	95 0 0	10	10 12 1/2	55 0 0	5 0 0—Dec. 20, 1854.
400	United Mines (copper), Gwynedd [S.E.]	40 0 0	100	100	61 5 0	2 0 0—Feb. 12, 1856.
20000	Valley of Towy (lead), Carmarthen [S.E.]	0 12 6	1 1/2	1 1/2	0 4 9	0 1 0—March 12, 1858.
512	Wendron Consols (tin), Wendron	23 7 8	32 1/2	32 1/2	2 0 0	1 0 0—Sept. 22, 1857.
6000	West Basset (copper), Illogan [S.E.]	1 10 0	24	24 25	12 18 0	0 8 0—Jan. 27, 1858.
256	West Canard (copper), Liskeard [S.E.]	20 0 0	105	100 115	285 5 0	2 0 0—Sept. 23, 1857.
256	West Damsel (copper), Gwynedd	10 7 0	115	—	22 0 0	2 0 0—July 20, 1857.
6400	West Fowey Consols (tin and copper)	7 0 0	8 1/2	8 1/2	0 2 6	0 2 6—March 5, 1858.
1024	West Providence (tin), St. Erth	2 11 7	3	3	33 1 0	0 10 0—April 8, 1857.
496	West Wheel Seton (copper), Camborne	38 10 0	310	310	116 10 0	8 0 0—April 13, 1858.
1228	Wheel Cliff (copper), Calstock	9 0 0	5	4 1/2 5 1/2	8 10 0	0 2 6—Feb. 24, 1857.
240	Wheel Hay (tin), St. Agnes	2 2 0	220	220 230	2 10 0	0 10 0—May 11, 1858.
512	Wheel Bassett (copper), Illogan [S.E.]	5 0 0	295	280 290 300	877 10 0	10 0 0—May 18, 1858.
256	Wheel Buller (copper), Redruth [S.E.]	5 0 0	295	280 290 300	877 10 0	10 0 0—May 18, 1858.
1024	Wheel Charlotte, Penryn, Cornwall	5 3 4	7	7	1 10 0	0 10 0—Sept. 9, 1855.
250	Wheel Clifford (copper), Gwynedd	—	250	240 260	42 0 0	3 0 0—Oct. 26, 1857.
4096	Wheel Edward (copper), Calstock [S.E.]	5 10 0	5 1/2	5 1/2	6 5 0	0 5 0—March 30, 1858.
5000	Wheel Fortescue (copper), Bodmin	nil.	—	—	0 2 4	0 1 6—Jan. 14, 1856.
128	Wheel Friendship (copper), Devon	50 0 0	80	80	2385 10 0	10 0 0—Feb. 11, 1858.
1024	Wheel Grylls (copper, tin), Breage	0 4 0	1 1/2	1 1/2	0 2 0	0 2 0—Feb. 24, 1857.
512	Wheel Jane (silver-lead), Kers	3 10 0	12 1/2	12 1/2	8 10 0	1 0 0—Oct. 18, 1857.
5000	Wheel Kitty (tin), St. Agnes	4 10 0	4 1/2	4 1/2	0 6 0	0 3 0—March 24, 1857.
1024	Wheel Kitty (tin), Uay Lelant [S.E.]	1 7 2	10	9 1/2 10	6 0 0	1 0 0—Sept. 17, 1857.
430	Wheel Lovell (tin), Wendron	33 0 0	18	18	31 0 0	1 0 0—Sept. 5, 1856.
448	Wheel Margaret (tin), Uay Lelant	10 15 0	55	52 1/2 55	85 0 0	1 0 0—Feb. 23, 1858.
1024	Wheel Mary Ann (lead), Menheniot [S.E.]	8 0 0	45	46 47	34 12 6	2 5 0—March 9, 1858.
80	Wheel Owles, St. Just, Cornwall	70 0 0	300	300	220 13 0	5 0 0—Aug. 2, 1857.
240	Wheel Reeth (tin), Uay Lelant	35 10 0	30	30 35	40 10 0	3 0 0—Aug. 23, 1852.
198	Wheel Seton (tin, copper), Camborne	107 0 0	130	125 135	286 10 0	2 0 0—Oct. 12, 1857.
1040	Wheel Trevelyan (silver-lead), Liskeard [S.E.]	4 10 0	24	23 1/2 24 1/2	32 10 0	0 2 6—April 26, 1857.
124	Wheel Tremayne (tin, copper), Gwynedd	11 2 6	1	1	10 2 0	0 6 0—Jan. 11, 1854.
4096	Wheel Wrey (lead), St. Ives	1 0 0	3 1/2	3 1/2	2 12 6	0 2 6—Dec. 22, 1857.
5000	Wicklow (copper), Wicklow	5 0 0	45	45	28 15 6	1 10 0—Jan. 14, 1858.

[* Dividends paid every two months. † Dividends paid every three months.]

FOREIGN MINES.

10000	Altan and Quenangen United (cop.), Norway	16 10 0	6	6	£4 5 0	£20 15 0—Nov. 21, 1853.
2464	Burra Burra (cop.), South Australia	5 0 0	135	135	195 0 0	5 0 0—March 3, 1858.
10000	Cobre Copper Company (cop.), Cuba [S.E.]	40 0 0	45	45 48	82 10 0	1 0 0—Jan. 26, 1858.
10000	Copago Mining Company, Chili [S.E.]	16 0 0	13	13	5 15 0	0 10 0—March 19, 1858.
7000	English and Australian	5 0 0	1 1/2	1 1/2	0 7 6	0 2 6—Feb. 23, 1858.
50000	General Mining Assoc., Nova Scotia [S.E.]	15 0 0	18 1/2	19	10 5 0	0 15 0—July 7, 1857.
10000	Linares (lead), Pozo Ancho, Spain [S.E.]	15 0 0	9 1/2	9 1/2	5 10 0	0 2 0—Feb. 24, 1857.
10000	Lusitania (of Portugal) [S.E.]	115 0 0	14	14 2	0 6 3	0 2 0—May 25, 1857.
100815	Marquiza and New Granada [S.E.]	1 0 0	6	6 1	0 5 0	0 1 0—Jan. 29, 1858.
10000	Pontgibaud (silver-lead), France [S.E.]	20 0 0	6	6 7	1 0 0	1 0 0—June 26, 1855.
7000	Royal Santiago (copper), Cuba [S.E.]	16 15 0	2	2 1/2	33 0 0	1 5 0—July 12, 1848.
11000	St. John del Rey, Limited	15 0 0	13	13 1/2	35 7 6	1 0 0—June 19, 1857.
43174	North British Mexican (silver), Mexico [S.E.] Av.	28 5 0	33 1/2	33 1/2	1 16 0	0 4 0—Feb. 14, 1853.
18876	North British Australian, Mexico [S.E.]	1 0 0	3 1/2	3 1/2	0 31 1/2	0 1 3—Feb. 25, 1857.